

BULLETIN

Pennsylvania Department of Agriculture

HARRISBURG

Vol. 9

December 15, 1926

No. 24

General Order No. 437

Some Phases of Taxation in Pennsylvania

Part I

Rural Taxation in Pennsylvania

By PROF. F. P. WEAVER

Part II

Wealth, Income and State Taxes Paid by Various Groups of Businesses in the State

By CLYDE L. KING

F. P. WILLITS, *Secretary of Agriculture*

Published semi-monthly by direction of the Secretary. Entered as second class matter, March 22, 1918, at the Post Office at Harrisburg, Pa., under the Act of June 6, 1900. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized on June 29, 1918.

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LETTER OF TRANSMITTAL

November 29, 1926

Honorable Gifford Pinchot,
Governor of Pennsylvania,
Harrisburg, Pa.

My dear Governor Pinchot:

I take pleasure in submitting for your consideration and approval, a study of some phases of taxation in Pennsylvania, especially as they relate to rural districts.

So little information was available on the rural tax situation that under the Act of 1895 which provides that the Secretary of Agriculture "shall give special attention to such questions as relate to valuation and taxation of farm land," I undertook this study, the findings of which are given in Part I.

Part I gives the results of the study of phases of the rural tax problem in different parts of the State made during the summer of 1925 under the immediate direction of Prof. F. P. Weaver of the Pennsylvania State College. The purpose of this study was twofold: First, to see how nearly the assessed valuation corresponds with the selling value of property in different counties in the State, in different townships and boroughs in the county, and as to different properties in the same political division; Second, to get the total net income of the agricultural industry in the State, the total worth of the farming people, and the amount of all taxes paid by agriculture to compare with similar data for other industries.

Part II gives the results of a study of the wealth, incomes and State taxes paid by the various industrial groups of the State, prepared by Dr. Clyde L. King, recently Secretary of the Commonwealth, and now of the University of Pennsylvania.

I recommend the publication of this manuscript in bulletin form.

Sincerely yours,
F. P. WILLITS,
Secretary of Agriculture.

SOME PHASES OF TAXATION IN PENNSYLVANIA

OUTSTANDING FACTS REVEALED BY THE STUDY

1. Some property owners both rural and urban pay from two to nine times as much tax in proportion to the property they own as others in the same town or township, simply because of unequal assessment.
2. With one exception, the assessment on farms averages higher in proportion to the sales value than on town property.
3. In some counties owners of large properties are able to keep their assessments much below what they should be in proportion to the assessment on smaller properties.
4. The costs of making assessments are not excessive in most cases, but the job that is done is so extremely poor that it would be expensive at any price.
5. The practice of making assessments by locally elected assessors, revised only by the county commissioners on appeal by the property owners has proved an unqualified failure. Assessors should be selected because of special qualifications for the difficult task which they must perform. The county commissioners should be empowered to employ a specially trained man, on full time, to study the assessment situation in the county and on the basis of information furnished by him revision should be made either up or down as circumstances warrant regardless of whether there is any appeal from property owners, to the end that the ratio of assessments to actual property values throughout the county may be on a uniform basis in fairness to all.
6. The town real estate owners in the southeastern farming section paid 16 1/2 per cent of their net income in taxes. The farmers in the same counties paid 17 1/2 per cent of their net income from the farm real estate in taxes. In the northern and western part of the State, 24 1/2 per cent of the net income from town real estate went for taxes and 55 per cent of the net income from farm real estate.
7. State aid for schools and highways has not been graduated sufficiently to equalize the burden of taxation on property in different sections of the State.

8. The present occupation tax results in a low tax burden on personal earnings or incomes and should be replaced by a tax on personal income, collected locally, but paid over to the State and the receipts thereof used in State aid for schools and highways so graduated as to make the tax on real estate proportional to income throughout the entire State.
9. Of the total earnings of the farm, the farmer, and all members of his family, there was paid in taxes in Hempfield Township, Westmoreland County, 20 per cent; in Upper Burrell Township, Westmoreland County, 14 per cent; in Crawford County 18 per cent; and in Warren County 20 per cent, leaving \$830, \$567, \$534, and \$384 respectively in each of these counties for interest on an average investment of \$6886, clothing for the family, doctor's bills and medicine, and such food and fuel as the farm did not supply.
10. Agriculture as a whole in the state carries a tax burden that consumes at least a 13 per cent larger share of the total earnings of the farm and the farmer than do all taxes paid out of the average earnings of the state with agriculture included in the average.
11. Outstanding among the relatively lightly taxed incomes of the state are personal incomes of various kinds and the incomes from manufacturing, construction and general service.
12. While definite figures are not available, from this study, on the exact amount of federal and local taxes paid by each group of enterprises in the state, the disparity in state taxes paid is so great that such figures on local and federal taxes paid by the various enterprises as were consulted could not possibly equalize the very unequal burden imposed by the State.
13. The heavy demand for funds for schools and roads to meet the minimum standards set for education and road construction places such a heavy burden of taxation on property in certain sections of the state, that much needed relief in these sections can come only from the extension of more state aid, graduated on a basis that will supply more relief where the tax burden is relatively heavy in proportion to income.
14. The manufacturing industry (Part II.) is notable not paying its fair share of state taxes.

Part I

Rural Taxation in Pennsylvania

By Prof. F. P. Weaver



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Part I

Rural Taxation in Pennsylvania¹

By F. P. WEAVER,

Professor of Agricultural Economics, Pennsylvania State
College

ASSESSMENTS

Assessments and Sales Values

According to the Act of Assembly of 1834, amended by Act of 1841, in accordance with which the property assessors are presumed to function, it is the duty of the assessors to make out and return a perfect list of all property taxable by law, together with a just valuation of the same.²

Six counties were selected, more or less at random in different parts of the State representing the various types of farming and various industrial conditions, and a study made of the assessments for the purpose of determining to what degree the system of making assessments, now in force, accomplishes the purpose for which it was set up.

Some attempt was also made to ascertain the costs of making the assessments with a view to determining whether such costs were excessive.

The supreme test of the system, however, rests more with the way in which it accomplishes the purpose for which it is set up than with the cost it entails.

Summary and Conclusions on Rates of Assessment Throughout the State

Any statewide comparison of assessments is valued chiefly for the purpose of determining whether a condition exists throughout the state which warrants State action in its correction. In a common-

¹Data in the six counties in which field studies were carried out were made possible by the cooperation of county commissioners, county agents, chambers of commerce, real estate dealers and farmers.

Acknowledgment is due Edgar L. Gasteiger, statistician of the Pennsylvania Department of agriculture, for assistance in the field and for taking charge of a greater part of the work in connection with the tabulations.

²Act of 1834, Section 2, P. L. 511 and Act 1841, Section 6, P. L. 395.

wealth where there is no statewide property tax rate, variations in assessments between counties do not bring about any great injustice in the distribution of the tax burden. If glaring variations are found within counties, however, and within the same townships, boroughs or cities and this condition is general throughout the State, it would seem as tho statewide action would not only be justified but essential in correcting the trouble.

The analysis of the six counties studied, if they may be considered to be a fair sample of the State, would force one to the conclusion that the present system of making assessments has failed utterly in accomplishing the purpose for which it was set up. Not only is it impossible to secure assessments at the full value which the law requires but it also appears impossible to get assessments made at any uniform rate either throughout a township, town or county. The variations in assessments are probably not any greater today than they have been for years but with the enormous increase in the tax budgets for roads, schools, and county purposes within recent years, the injustices brought about by these variations are of much greater consequence.

Weaknesses of the present system seem to come largely from incompetence on the part of assessors in making correct appraisals of value, unwillingness to do the amount of work required in making accurate assessments, unwillingness on the part of assessors to raise the rate of assessment in their own districts in order to avoid raising their district's share of the county tax, the inability to get concerted action throughout a county in this respect, influence on the part of the owners of large properties in keeping their assessments below the average of others, and the influence of property owners in general over the action of local assessors with whom they live as neighbors.

Assessments of farm properties, with the exception of Wyoming County, are uniformly at a higher rate than of town properties. Whether this is due to a more conscientious group of assessors as a rule in rural than in urban districts or to the fact that town properties have increased more in value in recent years than farms is difficult to determine from the data presented but it represents a condition which has resulted in grave injustice, especially in the last five years when incomes from farm property were extremely low, while city industries were going at a high rate.

It is not the purpose of this study to advocate any measures but rather to present facts as they are found which others may use in working out the best solution possible for the problems that confront us. It, nevertheless, is not out of place here to say that, judging from the conditions found in these six counties, it would

seem that some centralized authority in each county that would be competent to make correct estimates of sale value is essential to a good system for making assessments.

Cost of Making Assessments

Some effort was made in all counties to check up on the costs involved in making assessments under the present plan. In some counties all the costs of the last triennial assessment had not been computed at the time these data were collected and in others the costs of the triennial assessment were not kept separate from the registry assessment costs.

In Table I are shown the costs of making assessments in 24 counties and the ratio that these costs have to taxes levied on the assessment in 1925.

Table 1. Costs of Making Triennial Assessment and Ratio of These Costs to Taxes Levied in 1925.

County	Costs of Making Triennial Assessment	Per cent that Assessment Costs are of County Taxes Levied	Per cent that Assessment Costs are of all Taxes Levied on Property
Adams -----	\$7,532	3.8	1.3
Bedford -----	6,131	5.3	1.2
Bucks -----	9,739	2.1	0.5
Butler -----	9,564	1.3	0.5
Cameron -----	902	2.9	0.7
Clinton -----	3,602	2.9	0.6
Columbia -----	6,000*	3.2	0.5
Forest -----	930	3.3	0.7
Huntingdon -----	4,421	2.6	0.7
Indiana -----	5,503	2.0	0.3
Lebanon -----	8,308	3.5	0.5
Lawrence -----	12,285	2.5	0.5
Lehigh -----	19,832	3.4	0.5
Lycoming -----	12,383	3.1	0.8
McKean -----	9,681	6.0	0.7
Mifflin -----	3,608	3.0	0.6
Northampton -----	27,286	2.9	0.7
Pike -----	3,428	11.2	2.0
Snyder -----	1,504	2.4	0.7
Sullivan -----	1,483	3.9	1.0
Susquehanna -----	7,200	4.1	1.0
Tioga -----	7,023	3.4	1.0
Venango -----	9,229	2.5	0.6
Wayne -----	5,777	4.2	1.1
	\$182,551	2.8	0.6

*Approximate estimate.

The total cost for the 24 counties is \$182,551. The average cost per county \$7,606. This is 2.8 per cent of the county taxes levied on property in these 24 counties during 1925. Since this assessment is made once in three years it is not proper to charge all of it against the taxes of a single year. Neither would it be correct to charge only one-third of this amount, inasmuch as there are some costs incurred in the other two years in bringing the real estate assessments up to date.

Lebanon County will serve as an example of how the annual assessment costs would compare with the results in Table 1. The cost of making the triennial assessment was \$8,308. The cost of real estate assessment in 1924 was \$683. Assuming that this represents the average annual cost in years other than those in which the triennial assessment is made, the entire cost for three years would be two times \$683 plus \$8,308, or \$9,674. This charged equally to the three years which it covers makes an annual cost of \$3,225, or 1.4 per cent of the amount of county tax levied for the year 1925 and 0.2 per cent of all taxes levied instead of 3.5 per cent and 0.5 per cent as indicated in the table. Similar calculations for all the counties involved would no doubt show fairly accurately the portion of the tax which is used up in assessment cost, but the data for all these calculations are not at hand.

This assessment also serves as the basis for the road tax and with the exception of certain cities in the State for the school tax. On the basis of all taxes levied on the assessed property the costs of assessment are 0.6 per cent of the taxes and are therefore quite nominal in most of the counties in the State. A system of economy that would cut these costs in two could save the average tax payer less than one per cent of the county taxes which he pays. On the other hand, a system that would insure reasonably accurate assessments would save some farmers in Warren County from 50 to 60 per cent of all the taxes which they now pay, in Wyoming County 60 to 65 per cent, in Crawford County 50 to 60 per cent, in Westmoreland County 50 to 60 per cent, in Lancaster County 30 to 35 per cent and in Lebanon County 25 to 30 per cent. It is true that others whose properties are now assessed at much below the average rate would pay more than they pay now but the saving would come to those who are today suffering the greatest injustice. From conditions found in the cities and boroughs it is safe to conclude that equitable assessments would save many tax payers in the towns from equally unjust tax burdens.

This should not be interpreted as a brief against economy in the performance of a single government function, such as the making of assessments, but rather as a plea for economy through the better performance of that function. If possible, let us try to get an equitable assessment without any increase in the cost of getting it, but if a good system costs slightly more it would be far better to have it at that slightly increased cost than to continue with conditions as they now exist in many counties in the State.

Assessments and Value Data by Counties

The method followed was to check up the assessed valuation on the properties which changed hands in the last two or three years against the actual price for which the properties sold. Data on sales price were secured from the records in the recorder's office and from reliable real estate dealers. In securing data from recorded deeds those properties were included chiefly in which the full consideration was stipulated in the deed and where all the available evidence indicated that the real sales price was on record.

LEBANON COUNTY

In Lebanon County data were secured on 43 farms and on 110 city properties.

Table 2. Ratio of Assessment to Sales Value, Lebanon County.

Township	Number of samples	Average per cent that assessment was of the selling price	Range in per cent
North Annville, -----	6	82	61 - 107
Bethel, -----	3	93	44 - 100
Heidelberg, -----	3	101	68 - 120
E. Hanover, -----	6	80	62 - 111
Jackson, -----	3	77	57 - 87
South Lebanon, -----	6	94	74 - 132
Swatara, -----	4	92	79 - 122
Union, -----	3	80	46 - 95
Scattered, -----	9	75	50 - 102
Township totals, -----	43	85	44 - 132
Borough or city			
Lebanon, -----	90	75	9 - 133
Palmyra, -----	15	53	37 - 68
Scattered, -----	5	62	49 - 70
	110	71	9 - 133

Out of 110 city properties three were assessed above the price for which they were sold, and two at the selling price, making five out of 110 or four and one-half per cent of the properties studied that were assessed at or above their full value.

Out of 43 farm properties five were assessed for more than the selling price and four at the selling price, making nine out of 43 or 21 per cent that were assessed at or above the sale price.

The present board of County Commissioners in Lebanon County has made a special effort to get the 1925 assessment as near to the actual value as possible, and have accomplished a great deal in that respect. The range of 9 per cent to 133 per cent shows how far from solution, however, this problem still is in Lebanon County and indi-

cates the difficulty that County Commissioners encounter in trying to work out equitable assessments with the present machinery for making assessments. Within a single township properties are found which are assessed at more than twice the percentage of their value that other properties in the same township are assessed at, which means that one farmer pays more than twice as much county, road and school tax in proportion to the value of his property as some other farmer pays. In the City of Lebanon, the property with the highest rate of assessment, paid almost fifteen times as much tax for every dollar of value in it as the one with the lowest rate. Undoubtedly the range in variation is considerably greater in many townships than that shown in the table, since the number of properties on which accurate data could be obtained was so low in many townships. With 90 properties in the City of Lebanon, it is quite likely that some of the extreme cases were included.

According to the results shown in Table 2, the assessed value of farms average 85 per cent of the selling price. In a labor income survey of 164 farms in the county, in which farmers were asked to place an estimated value on their farm real estate, the assessments average 78 per cent of the farmers estimated value. One would be led to believe that farmers themselves as a rule are inclined to value their farms somewhat higher than the price which they are able to obtain for them in case of a sale.

Assuming that an assessor might be expected to assess property within 10 per cent of its actual value and measuring the success of assessors in Lebanon County by that standard, we find that in 24 out of 153 cases was that accomplished or in fifteen and two-thirds per cent of the cases. The rural assessors came within 10 per cent of sales value in 28 per cent of the cases and the city and borough assessors in 11 per cent.

Table 3. Degree of Accuracy with which Assessments Measured Selling Price in Lebanon County, Pa.

Per cent that Assessment was of Selling Price	Townships		Boroughs and Cities	
	Number of Cases	Per cent of Total	Number of Cases	Per cent of Total
Over 100, -----	6	14	6	5.5
90 to 100, -----	10	23.3	10	9.1
80 to 89, -----	8	18.7	11	10.9
60 to 79, -----	16	37.3	41	37.3
40 to 59, -----	3	6.7	35	31.8
Under 40, -----	0	0	7	6.4
Totals, -----	43	100	110	100

LEBANON COUNTY

Size of Property and Ratio of Assessment

For the purpose of determining whether there was any tendency to assess very large and very small properties differently, all the properties studied were classified according to selling price. The results are shown in Table 4.

Table 4. Influence of Size on Rate of Assessment.

Value of Property	City and Borough		Townships	
	Number of Cases	Rate of Assessment in Per cent	Number of Cases	Rate of Assessment in Per cent
\$25,000 and over, -----	8	71.87	0	-----
\$10,000 to \$24,999, -----	11	52.0	5	83.43
\$ 5,000 to \$ 9,999, -----	29	65.85	16	87.93
\$ 2,500 to \$ 4,999, -----	42	68.17	12	81.27
Under \$2500, -----	24	66.44	10	82.38

Size of property apparently has no consistent influence on the rate of assessment in this county. The highest rate in the city is on properties valued at more than \$25,000, while the lowest rate is on those between \$10,000 and \$25,000. All properties below \$10,000 carry an average assessment of about two-thirds the actual value, while all farms carry an average of somewhat over four-fifths of actual value.

LANCASTER COUNTY

Through the courtesy of some farm real estate dealers in Lancaster, the selling price was obtained on 32 farms which were sold during the last two years. The 1925 assessment on the same farms was secured from the assessment books in the Court House. Three of these farms were located in Elizabeth Township. These showed a range of 35 to 92 per cent of the selling price, an average for the 3 of 61 per cent. Three in Pequea Township ranged from 27 to 105 per cent with an average of 62. Twelve in Warwick Township ranged from 37 to 78 per cent, with an average for the township of 51 per cent. The other 14 farms were scattered throughout ten townships. The assessment of these 14 ranged from 36 to 93 per cent of the selling price. The 32 farms in the county on which the selling price and assessment were secured showed that the lowest assessment was 27 per cent of the selling price and the highest assessment 105 per cent, with an average of 55 per cent. One farm of the 23 studied paid four times as large a share of the county taxes as another farm of this group in proportion to their value.

In Lancaster County, the county tax rate is only two mills, hence inequalities in assessments between townships do not carry as huge

an injustice as in some counties in the State. Variations were found within the same township, however, which showed one farm paying four times as large a share of all county, school, and road taxes as another farmer in that same township on the basis of the selling value of their properties.

In addition to the above data on farms that were sold, the assessment was secured on 102 farms that were listed for sale at a specific price. The assessment ranged from 23 to 122 per cent of the price for which the owner was willing to sell the property and averaged 47 per cent for the entire group. Since most of the farms have been held for sale at the figure for some time, it is safe to assume that the list price averaged somewhat higher than the price for which they could be readily sold.

On 69 farms on which data were secured from cost accounts, kept by the farmer in cooperation with the Extension Service of The Pennsylvania State College, the assessment averaged 56.5 per cent of the estimated value which the farmer placed on the farm. In this county the estimated capitalization checks very closely with the selling value as indicated by this test.

During the year 1921 the Lancaster Chamber of Commerce in cooperation with the City Real Estate Board made a study of the rate of assessment in the various wards in the City of Lancaster. The Real Estate Board selected a number of properties at random and appraised the value on a prewar basis. The assessment was then secured on the same properties. For purposes of this present study, the valuations placed on these properties on a prewar basis was increased by 50 per cent to bring approximately to their present value.¹ This is no doubt very conservative.

In all 178 properties were appraised and their assessment secured. These properties range in value from \$600 to \$450,000. The sample was selected to represent all types of property and all sections of the city, and represented a total of property valued at \$5,452,500. In Table 5 is presented a brief summary of the results of this study.

Table 5. Comparison of Assessed Value and Appraised Value of Property, City of Lancaster.

Value	Number of Cases	Range in Rate of Assessment	Average Assessment
Under \$2250, -----	29	35 % to 100 %	52.7%
\$2250 to \$3750, -----	26	8.2% to 69.5%	34.9%
\$3750 to \$7500, -----	27	11.1% to 61 %	24.5%
7500 to \$15000, -----	27	7.8% to 44.4%	23.4%
\$15000 to \$37500, -----	25	10.8% to 66.7%	26.7%
\$37500 to \$75000, -----	23	12.2% to 38.7%	21.9%
Over \$75000, -----	20	4.5% to 50 %	28.1%

¹On advice of J. G. Forney, Real Estate Dealer, Lancaster, Pennsylvania, at whose courtesy this information was made available for this study.

The average assessment for the city is 26.5 per cent as compared with 55 per cent for the farms. It is also quite evident that in Lancaster the size of property has much more influence on the rate of assessment than in Lebanon County. The lower priced properties were assessed at almost twice as high a rate as the average for the entire group. The average for the higher priced groups was raised somewhat by the inclusion of a few very unusual cases. Eliminating 9 properties out of the entire 178 gives an average for the remaining group of 18.7 per cent. This is just about one-third of the rate that prevails in the case of farms that were sold and a little more than one-third of the rate of assessment of the cheaper city properties.

In the case of farms size seemed to have no influence on rate of assessment as indicated in Table 6.

Table 6. Size of Farms and Rate of Assessment.

Value of farm	Number of Cases	Average Rate of Assessment
Under \$2500, -----	2	57.8%
\$2500 to \$4999, -----	9	55.7%
\$5000 to \$9999, -----	12	62.2%
\$10000 and over, -----	10	51.7%

WESTMORELAND COUNTY

Westmoreland County was selected as representative of the bituminous coal mining and industrial section of southwestern Pennsylvania as contrasted with the two previous counties which lie in the premier farming region in the southeastern portion of the State.

The county commissioners instructed the assessors to place assessments at from 60 to 80 per cent of the actual value.

Data were secured on the selling price and assessment of 350 farms and on 168 city and borough properties which changed hands in the last two years.

In Table 7 are shown the results of the study of farm assessments by township. The range and general average averages indicate how far short the assessors fall of performing their duty in accordance with the instructions under which they were working. We feel that in this county sample sufficiently large was obtained to be indicative of the condition which exists throughout the county.

The average of 36.6 for the county is just about one-half as high as the rate for which the commissioners asked. This indicates the difficulty encountered in getting local assessors to place a fair valuation on the properties in their townships when they have no control over what other assessors will do in other townships.

Table 7. Ratio of Assessment to Sales Value of Farms in Westmoreland County.

Township	Number of samples	Average per cent that assessment was of the selling price	Range in per cent
Allegheny, -----	15	36	17 to 81
Bell, -----	11	64	29 to 103
Cook, -----	5	29	16 to 62
Derry, -----	26	34	27 to 82
Donegal, -----	12	33	9 to 100
E. Huntingdon, -----	24	45	22 to 114
Fairfield, -----	8	44	25 to 71
Franklin, -----	23	39	23 to 109
Hempfield, -----	35	47	13 to 93
Ligonier, -----	18	37	15 to 91
L. Burrell, -----	17	34	17 to 100
Loyalhanna, -----	11	41	26 to 86
Mt. Pleasant, -----	20	47	26 to 95
N. Huntingdon, -----	5	58	53 to 80
Penn, -----	17	46	33 to 100
Rostraver, -----	20	27	18 to 67
Salem, -----	26	54	24 to 129
Sewickley, -----	7	56	40 to 66
S. Huntingdon, -----	4	66	56 to 100
St. Clair, -----	5	47	23 to 72
Unity, -----	19	39	22 to 90
Up. Burrell, -----	4	49	40 to 54
Washington, -----	18	44	28 to 80
Total for county, -----	350	36.6	9 to 129

The lowest township average is 27 per cent and the highest is 66 per cent. If these averages represent a fair sample of these two townships, it means that the farmers of the latter pay two and one half times as much of the county taxes relatively to the actual value of their properties as do the farmers in the township.

Since the heaviest portion of the tax burden on farmers comes from road and school taxes which are assessed by local districts the range in per cent within the various townships is much more significant and the cause of much more injustice in tax paying than the low average for the county or the variation between townships. In Unity Township one farm was assessed for 22 per cent of its sales value, another farm for 90 per cent. The owner of the latter paid over four times as large a share of all taxes, local and county, as the owner of the former in comparison with the value of their properties. In Allegheny Township one farmer was paying almost five times as much as another, in East Huntingdon Township over five times, in Salem Township five and one-third times, in Hempfield Township seven times, and in Donegal Township eleven times as much as one of his neighbors in comparison with the actual value of their properties.

Assessments in the boroughs averaged even lower than in the townships. There was, however, the same lack of uniformity both between different boroughs and within the same borough as was found in the township.

In Table 8 are shown the results found in the case of 168 borough properties on which the selling price and assessment was secured.

Table 8. Ratio of Assessment to Sales Value of Borough Properties in Westmoreland County

Borough	Number of Cases	Average Per Cent that Assessment was of the Selling Price	Range in Per Cent
Adamsburg, -----	3	36	26 to 57
Arona, -----	4	94	87 to 114
Avonmore, -----	4	37	31 to 43
Bolivar, -----	4	34	27 to 73
Derry, -----	9	29	20 to 50
E. Vandergrift, -----	6	34	24 to 86
Export, -----	2	33	30 to 50
Greensburg, -----	56	36	11 to 69
Hyde Park, -----	3	30	29 to 50
Irwin, -----	3	45	40 to 54
Jeannette, -----	14	32	17 to 49
Latrobe, -----	18	31	17 to 100
Ligonier, -----	2	33	27 to 133
New Kensington -----	40	27	10 to 91
Totals, -----	168	31.6	10 to 133

Assessment in Arona averaged three and one-half times as high as in New Kensington, hence Arona pays three and one-half times as much county tax as New Kensington in proportion to the value of the properties in the two towns. In the borough of New Kensington one property is paying nine times as large a share of all local and county taxes as another property within the same borough, on the basis of actual value. The range in per cent in other boroughs shows glaring inequalities.

Table 9. Degree of Accuracy with which Assessments Measured Selling Price in Westmoreland County.

Per Cent that Assessment was of Selling Price	Townships		Boroughs	
	Number of Cases	Per Cent of Total	Number of Cases	Per Cent of Total
Over 100 -----	5	1.4	2	1.2
90 to 100 -----	16	4.6	5	3.0
80 to 89 -----	17	4.8	2	1.2
60 to 79 -----	56	16.0	5	3.0
40 to 59 -----	107	30.6	28	16.6
25 to 39 -----	118	33.7	88	52.4
Under 25 -----	31	8.9	38	22.6
Totals -----	350	100.0	168	100.0

From the data in Table 9 it can be seen that in only three per cent of the cases did the borough assessors place a valuation between 60 and 80 per cent of the sales value as instructed, and the township assessors in 16 per cent of the cases. Borough properties were assessed at less than 40 per cent of the actual value in three-fourths of all the cases and farms in about two-fifths of all cases studied.

Influence of Size of Rate of Assessment in Westmoreland County

In Table 10 are shown the results of a comparison of assessment and selling price of Westmoreland County properties sorted by size so as to check on the influence of size on rate of assessment.

Table 10. Rate of Assessment on Properties of Different Sizes.

Value of Property	Boroughs		Townships	
	Number of Cases	Rate of Assessment.	Number of Cases	Rate of Assessment.
\$100,000 and over -----	2	27.7	2	28.4
\$ 25,000 to \$99,999 -----	12	30.6	3	25.8
\$ 10,000 to \$24,999 -----	35	33.0	27	40.4
\$ 5,000 to \$ 9,999 -----	54	31.3	100	41.3
\$ 2,500 to \$ 4,999 -----	36	36.0	94	45.5
Under \$2,500 -----	33	46.1	107	52.7

The same tendency to assess the cheaper properties too high in comparison with the more valuable properties when their actual selling value is taken as a basis is manifest both in towns and in townships. The rate of assessment on properties in the townships that were worth over \$25,000 was only about one-half as high as the rate on properties that sold for less than \$2,500. In the boroughs the highest priced properties were assessed at about 60 per cent of the rate that held for the cheaper properties.

Table 11. Rate of Assessment on Properties of Different Sizes of Boroughs.

Value of Property	Greensburg		New Kensington		Other Boroughs	
	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate
\$100,000 and over -----	1	28.0	1	27.4	0	-----
\$25,000 to \$99,999 -----	3	33.5	4	26.8	5	32.5
\$10,000 to \$24,999 -----	17	40.2	14	23.9	4	35.1
\$ 5,000 to \$ 9,999 -----	16	32.0	16	29.5	22	32.0
\$ 2,500 to \$ 4,999 -----	9	39.8	5	32.2	22	35.4
Under \$2,500 -----	8	35.1	1	91.0	24	49.2

CRAWFORD COUNTY

Crawford County was selected to represent the northwestern farming area outside of the coal, oil and gas fields. In that section agriculture, the industries in the towns and such trading and commerce as rests on these two must carry the major portion of the tax burden. In this respect it is quite similar to the southwestern section represented by Lebanon and Lancaster Counties in this study, but it has quite a different type of agriculture and very different economic conditions for farming.

The selling price was secured on 227 farms distributed quite generally throughout the county and on 99 borough properties located in four of the leading towns in the county.

A comparison of the assessment with the selling price of the township properties is shown in Table 12 and the town properties in Table 13.

West Mead Township has many residence properties in addition to its farms. Data were secured on nine farms and on nine residences.

Table 12. Ratio of Assessment to Sales Value of Farms in Crawford County.

Township	Number of Samples	Average Per cent that Assessment was of the Selling Price	Range in Per Cent
Athens	10	53	34 to 125
Beaver	3	45	39 to 67
Bloomfield	9	57	30 to 118
Cambridge	6	67	45 to 109
Conneaut	5	43	31 to 65
Cussewago	5	55	50 to 60
Fairfield	7	46	35 to 76
E. Fairfield	6	31	20 to 71
E. Fallowfield	5	44	26 to 98
Greenwood	12	55	27 to 92
Hayfield	14	46	22 to 80
E. Mead	4	37	14 to 77
W. Mead	18	30	13 to 65
Oil Creek	4	31	25 to 67
Pine	3	66	35 to 100
Randolph	18	54	34 to 92
Richmond	4	57	48 to 98
Rockdale	7	44	30 to 59
Rome	6	53	44 to 88
Sadsbury	3	33	19 to 60
N. Shenango	8	48	28 to 96
S. Shenango	6	39	18 to 79
Sparta	11	71	33 to 156
Spring	5	43	32 to 54
Steuben	7	52	33 to 73
Summerhill	9	57	34 to 78
Summit	4	42	29 to 50
Troy	3	58	47 to 89
Union	3	64	50 to 69
Venango	2	39	34 to 44
Vernon	10	33	21 to 61
Wayne	3	58	52 to 62
Woodcock	6	50	27 to 67
County totals	227	46.3	13 to 156

The assessment on the farms in this township averaged 43 per cent of the selling price and of the town houses 16 per cent of the selling price. The three smallest farms averaged 31 per cent, the three medium sized 42 per cent and the three largest 55 per cent of the selling price. The tendency to assess large properties at a lower

rate, found in Westmoreland County, does not hold in the assessment of farms in the township but the opposite tendency is decidedly in evidence.

One property in Sparta Township pays twelve times as much county tax as a certain property in West Mead township in proportion to their value. In West Mead township one property pays five times as large a share of all county, school and road taxes as another property within the same township in proportion to their value as determined by selling price. In Sparta township one farm pays almost five times as large a share of all local and county taxes as another farm in the same township in proportion to their selling price. In most of the townships in the county some farms are assessed at from two to three times as high a proportion of their value as other properties within the same townships.

Undoubtedly the limited number of samples secured in some of the townships limits the accuracy with which these figures may be said to be a fair sample of the condition in each township. More samples might bring the township averages closer together, but they would also, no doubt, show up more glaring variations and increase the range within townships. In all cases data were secured on the properties in each township which changed hands during the last two years and for which authentic figures could be obtained.

Table 13. Ratio Assessment to Sales Value of Borough Properties in Crawford County.

Borough	Number of Samples	Average Per Cent that Assessment was of the Selling Price	Range in Per Cent
Cambridge Springs -----	12	32	50 to 46
Linesville -----	6	36	30 to 45
Meadville -----	59	35	19 to 73
Titusville -----	22	37	24 to 58
Totals -----	99	34.7	19 to 73

Among the 59 properties studied in Meadville some are paying almost four times as large a share of county, school and borough taxes as others when based on selling price.

Table 14. Degree of Accuracy with which Assessments Measure Sale Value in Crawford County.

Per Cent that Assessment was of Selling Price.	Townships		Boroughs	
	Number of Cases	Per cent of Total	Number of Cases	Per cent of Total
Over 100 -----	7	3.1		
90 to 100 -----	9	4.0		
80 to 89 -----	9	4.0		
60 to 79 -----	42	18.5	3	3.0
40 to 59 -----	91	40.0	24	24.2
25 to 39 -----	51	22.5	62	62.7
Under 25 -----	18	7.9	10	10.1
Totals -----	227	100.0	99	100.0

The county commissioners of Crawford County say that all assessors in that county are instructed to place assessments at one-half of the actual value. Assuming that assessors should be able to make assessments within 10 per cent. of this figure either way, township assessors succeeded in doing this in forty per cent. of the cases and borough assessors in twenty-four per cent. of the cases. Almost 30 per cent. of the farms are assessed at over 60 per cent. of this value but only three per cent. of the borough properties. Of the farms about 30 1-2 per cent. are assessed at less than 40 per cent. of their value and almost 73 per cent. of the borough properties are assessed at less than 40 per cent. of what they sold for.

The average assessment of the the 227 farms studied is one-third higher than the assessment of the 99 town properties in proportion to their value.

The full significance of these figures and of the condition which existed in Crawford County previous to the present triennial assessment can be realized only when these figures are considered in connection with the fact that the present triennial assessment is 72 per cent. higher in Meadville than the previous assessment, in Titusville 90 per cent. higher, while for the county as a whole the assessment was raised only 27 per cent.; indicating that the farms had been assessed at very nearly the present rate while the towns were only a little over one-half of what they now are.

The average of 46.3 for all township properties is reasonably close to the 50 per cent. for which the commissioners asked, but this is little consolation to the farmer whose property is assessed at one and one-half times its value while other farmers in the county have farms assessed at one-seventh of their value, and many city properties at one-fifth of their value. Any economics that might be effected in the making of assessments could save the farmer only an insignificant part of what he is over-taxed now while on the other hand a system that costs twice as much as the present one but secures uniform rates of assessment would be well worth all it would cost for the relief from unjust taxation which it would bring about.

Table 15. Influence of Size of Property on Rate of Assessment.

Value of Property	Townships		Boroughs	
	Number of Cases	Rate of Assessment	Number of Cases	Rate of Assessment
\$25,000 and over -----			2	57.6
\$10,000 to \$24,999 -----	5	32.3	12	34.7
\$ 5,000 to \$ 9,999 -----	29	42.9	30	32.8
\$ 2,500 to \$ 4,999 -----	71	44.4	42	35.5
Under \$2,500 -----	121	58.5	13	39.4

If one disregards the properties which sold for over \$25,000, of which data were secured on only two, there is a noticeable lowering of the rate of assessments as the value of the property increases. This is more pronounced in the townships than in the boroughs and is contrary to the condition found in West Mead Township, but in harmony with the practice in Westmoreland County and in the City of Lancaster.

WYOMING COUNTY

Wyoming County is located in the northeastern dairy section of the State where there are neither coal, oil, gas nor extensive industries and where as a consequence farming and such trade as grows out of it must support schools, roads, and all forms of local government. This county is fairly representative of a large part of that northeastern portion of State which lies outside of the anthracite coal fields.

Of the farms which were sold during the last few years, 107 were recorded in such a manner that the selling price and the assessment on them could be secured.

Similar data were also secured on 91 properties located in the various boroughs of the county.

In Table 16 are shown the averages by townships and by boroughs and the variation found within each. The greatest variations were found in Tunkhannock borough and in Nicholson township.

Table 16. Ratio of Assessment to Sales Value, Wyoming County.

Township	Number of Cases	Average Per Cent that Assessment was of Selling Price	Range in Per cent
Braintrim -----	4	35	27 to 67
Clinton -----	7	37	19 to 82
Eaton -----	6	31	16 to 60
Exeter -----	4	24	21 to 35
Falls -----	9	30	12 to 47
Forkston -----	8	33	23 to 47
Lemon -----	10	34	17 to 65
Mehoopany -----	2	33	31 to 56
Meshoppen -----	3	51	40 to 78
Monroe -----	10	22	12 to 55
Nicholson -----	9	36	13 to 72
North Branch -----	3	39	30 to 60
Northmoreland -----	8	19	18 to 32
Noxen -----	5	30	24 to 60
Overfield -----	7	16	8 to 24
Tunkhannock -----	3	34	20 to 37
Washington -----	4	39	30 to 42
Windham -----	5	45	35 to 67
Township Totals -----	107	29.1	8 to 82
Factoryville Boro. -----	16	31	22 to 59
Laceyville Boro. -----	9	44	30 to 71
Meshoppen Boro. -----	14	41	22 to 90
Nicholson Boro. -----	5	39	25 to 61
Tunkhannock Boro. -----	47	36	8 to 100
Borough Totals -----	91	36.2	8 to 100

The lowest assessment found in any township or borough was eight per cent. of the sale value while the highest was 100 per cent. These extremes are found in Tunkhannock Borough and show that one man is paying taxes at over twelve times as high a rate, compared to the value of his property, as one of his neighbors pays. The variations in all the political divisions are great enough to cause very unjust distribution of taxes.

Table 17. Degree of Accuracy with which Assessments Measure Sales Value in Wyoming County.

Per Cent. that Assessment was of Selling Price	Townships		Boroughs	
	Number of Cases	Per Cent of Total	Number of Cases	Per Cent of Total
90 to 100 -----			3	3.3
80 to 89 -----	1	1.0	1	1.1
60 to 79 -----	9	8.4	7	7.7
40 to 59 -----	95	23.4	36	29.6
25 to 59 -----	44	41.1	33	36.2
Under 25 -----	28	26.1	11	12.1
Totals -----	107	100.0	91	100.0

In this distinctly agricultural section a condition is found which is exactly the opposite of that found in other counties studied. The borough assessments not only average higher than the township assessments, but the variation in assessments is greater in the boroughs. This is the only county encountered thus far where no assessments of over 100 per cent. were found and only one farm of over 80 per cent, while four town properties are assessed at more than 80 per cent. of what they were sold for. Forty-eight per cent or less than half of the town properties and 67 per cent or two-thirds of the farms are assessed at less than 40 per cent. of actual value.

Influence of Size on Rate of Assessment

Table 18. Influence of Size of Property on Rate of Assessment.

Value of Property	Townships		Boroughs	
	Number of Cases	Rate of Assessment	Number of Cases	Rate of Assessment
\$10,000 to \$24,999 -----	6	18.0	3	36.9
\$ 5,000 to \$ 9,999 -----	19	26.1	15	34.1
\$ 2,500 to \$ 4,999 -----	33	33.5	24	33.1
Under \$2,500 -----	49	44.2	49	48.5

Farms worth over \$10,000 are assessed at less than half as high a rate as those worth less than \$2,500. In the towns this tendency to assess the more valuable properties relatively lower than the less valuable ones is less pronounced and less consistent than in the townships, but the tendency appears to hold especially in the lowest class of properties.

WARREN COUNTY

Warren County was chosen to represent the conditions found in the oil and gas regions of the State.

In Table 19 are shown the results of comparing the assessment with the selling price of 113 farms on which it was possible to secure these two figures. The variations are enormous in practically all districts. In Elk Township where only two samples were obtained both are assessed at an extremely high rate. It is probably not safe to conclude that so few samples are typical of the township. The entire 113, however, may be assumed to show fairly well the conditions throughout Warren County, especially the enormous variations which exist.

Table 19. Ratio of Assessment to Sales Value of Farms in Warren County.

Township	Number of Samples	Average Per Cent that Assessment was of Selling Price	Range in Per cent.
Brokenstraw -----	8	31	13 to 80
Conewango -----	5	52	35 to 120
Columbus -----	11	58	14 to 133
Corydon -----	4	37	20 to 100
Deerfield -----	6	51	20 to 56
Eldred -----	8	36	13 to 100
Freehold -----	5	58	39 to 100
Farmington -----	13	61	20 to 115
Pine Grove -----	11	52	20 to 90
Pittsfield -----	7	51	33 to 90
Sugar Grove -----	11	37	18 to 95
Spring Creek -----	9	39	22 to 160
South West -----	5	37.6	25 to 69
Scattered -----	11	42	24 to 151
Township Totals -----	113	47.2	13 to 160

In Columbus Township among eleven cases two were found where over nine times as much tax was paid by one in proportion to value as by another. In Eldred Township one farm paid eight times as much as another, in Brokenstraw six times, in Farmington six times, in Spring Creek and South West seven times, and in Sugar Grove and Corydon five times as much as other farms in the same townships in proportion to the actual value of the farms.

Table 20. Ratio of Assessment to Sales Value of Properties in the Borough of Warren.

Ward	Number of Samples	Average Per Cent that Assessment was of Selling Price	Range in Per cent.
First -----	13	46.5	25 to 60
Second -----	5	66.0	52 to 89
Third -----	7	46.9	39 to 55
Fourth -----	21	37.4	10 to 55
Fifth -----	24	31.6	19 to 49
Sixth -----	18	33.5	24 to 65
Seventh -----	16	38.1	22 to 67
Eighth -----	10	37.2	23 to 51
Ninth -----	6	27.8	22 to 40
Borough Average -----	120	42.0	10 to 89

In comparing the data in Table 20 with that in Table 19, it is apparent that there is somewhat more uniformity in the Borough assessments than in the townships. The range of from 10 per cent. to 89 per cent of sales value shows however that there is room for a great deal of improvement here.

Table 21. Influence of Size on Rate of Assessments in Warren County.

Value of Property	Townships		Boroughs	
	Number of Cases	Rate of Assessment	Number of Cases	Rate of Assessment
\$25,000 and over -----			4	53.3
10,000 to \$24,999 -----	3	33.3	5	52.0
5,000 to 9,999 -----	13	42.9	37	35.8
2,500 to 4,999 -----	30	41.6	61	38.4
Under \$2,500 -----	67	61.4	13	44.1

From Table 20 it is evident that in the first, second, and third wards, where the most valuable properties are located, the rate is higher than in any other ward. The data in Table 21 also checks the fact that in the borough there is a tendency to assess the higher priced properties at a higher rate. This tendency is the opposite from that found in most of the other counties studied and also the opposite of the conditions found in the rural sections of Warren County where farms valued under \$2,500 are assessed at almost twice as high a rate as those which sold for over \$10,000.

REAL ESTATE INCOMES COMPARED WITH TAXES

The Problem

In this part of the study we have assumed that the main purpose in taxation is to raise money to finance the necessary and recognized functions of the government. In levying and collecting taxes the

aim should, therefore, be to secure the necessary amount of money with the least possible amount of hardship to the taxpayers. Whether this means in all cases, a tax that is directly proportional to the income of the taxpayer or graduated with the size of the income, it is not our purpose to attempt to discuss here but we do believe that property taxes should be proportional to the income from the property. The major portion of all taxes should come out of the current income of the people, that is, out of the surplus above cost of operation. Therefore, a comparison of taxes with income is one of the first essentials in judging the equity of any taxing system, and so far as real estate taxes are concerned it is the main basis for judgment.

To collect taxes which cannot be paid entirely out of current income means taking a portion of the saved up capital of the people and using it for current government expense, or else the redistributing of this capital among other owners. There are some who believe that the State should perform this socialistic function of redistributing the wealth of the people, but so far the government is doing it consciously only in the case of inheritance taxes and it is not the purpose of this study to discuss these. The study is, therefore, made with the view of finding out to what extent taxes on real estate are proportional to the income from different kinds of real estate, in the belief that this is the best measure of their equity.

One of the chief purposes in State aid to local units of government for schools, highways and similar purposes is to give the people of the less populous and less wealthy sections schools, roads and other facilities for social and economic activities more nearly on a par with those enjoyed in the more densely settled portions of the State without imposing tax burdens on the less wealthy sections which it is impossible for these people to carry. Children, born and educated in these remote areas, are being educated not for the good of those areas alone, but for the good of any section of the State or Nation in which they may later reside. Main highways through rural sections are used today, not chiefly by the people who live along them, but by the citizens of the State and Nation as a whole.¹

Development of the resources of the State would in many cases be hampered if each section had to build its own highways. Hence it is felt that the burden of education and of building maintaining highways should be to some extent equalized and not fall with a disproportionate force on the citizens of the remote areas as compared with the burden on the citizens of other sections. State aid should distribute the cost of maintaining schools and highways somewhat equit-

¹According to data collected by the Bureau of Public Roads, United States Department of Agriculture on six of the main highways in Pennsylvania, 4.84 per cent of the passenger cars passing over these roads were farm owned and 95.16 per cent were city owned. Of the trucks 5.14 per cent were farm owned and 94.86 per cent were city owned. (Used by courtesy of U. S. Department of Agriculture.)

ably among all the citizens of the State. Does the present system accomplish that purpose? If not, where does it fail to do so and in what respect can it be improved so as to more nearly equalize the burden of tax paying?

Taxes on real estate are the main source of the local support for schools and highways, therefore a comparison of the income and taxes on real estate in different sections will give some measure of the degree of equalization brought about by State aid. How evenly does the local tax fall on farm real estate in different sections of the State? How does the tax burden on town real estate compare with that on farm real estate? How evenly is the tax in towns distributed among the different types of real estate in the town?

Procedure

To get some authentic answer to these and other questions, income and tax data were collected on a large number of properties situated in the urban and rural sections of Lebanon, Lancaster, Westmoreland, Crawford, Warren and Wyoming Counties in Pennsylvania.

Problems Involved

One of the difficulties encountered was in securing data on incomes from different kinds of property on a basis that definite comparison can be made. In the case of city and borough properties a sample was secured from these that are being rented. The cash rental for a year was taken to represent the gross income from such properties. Not many landlords keep accurate accounts of expenditures on property but such data were secured wherever possible and in other cases estimates were secured from real estate dealers on the proportion of the gross income from property that is net before taxes are paid.

In the case of farm properties, data were secured from cost accounts where any were available and in other cases an estimate of the complete income and expenditures from the farm and the labor expended on it was secured by making a farm income survey with the assistance of the farmer on such records as he had available. The farms were selected with the aid of the county agent so as to represent, as nearly as possible, a fair sample of the agriculture of the county or of the respective township under consideration. In Lancaster County where the data were secured from cost account books, kept by the farmer with the aid and direction of Mr. Harry Sloat, farms better than the average of the county make up the sample. Only the better type of farmer can generally be induced to keep accurate cost accounts. In Lebanon County records that had been collected by the county agent, Mr. A. C. Berger, with the aid

of Farm Management specialists from The Pennsylvania State College,¹ were used as sources of income data. These farms were selected to be as fair a sample as possible of the main portion of the agriculture of the county.

On tenant-operated farms the total income from sales of the landlord's share of the products was taken as the gross income from the farm real estate to compare with the gross rentals on city properties. This income, less the expenditures made by the landlord for repairs to maintain the property in the same condition as at the beginning of the year and for insurance, are taken as the net income from the farm real estate before taxes are paid.

Where farms are operated by the owner it is more difficult to determine that portion of the income should be attributed to the farm real estate and what portion to the farmer's business enterprise of farming. It is difficult to estimate accurately the value of the house rent which the farm supplies since few houses are rented in the localities where the farms are situated. The value, on the farm, of such products as the farmer and his family consume is also quite difficult to estimate very accurately.²

The figure for the net income from real estate on farms operated by the owner therefore contains, from necessity quite a number of estimates. These estimates were, however, made in nearly all cases with the assistance of the farm owner and we believe are on the average fair estimates.

In order to allow the reader bases for drawing his conclusions other than the figure for net income which includes so many estimates, two other figures will also be given. To some persons one figure may be more valuable and to others one of the other figures. In all cases a study of all three should give a fairly accurate picture of the relation of taxes to income on these owner operated farms.

Three Methods for Showing Income on Owner-Operated Farms

1. *Net income* from the farm real estate before taxes are paid is figured by crediting the farm with all receipts from sales of products of the farm, any increases in inventory either of the real estate or of livestock or crops, the estimated value of the house rent and of the products of the farm consumed by the farmer and his family. From this all expenses in connection with the farm business (except taxes and interest on borrowed money) are deducted, also the value

¹These records were a part of a production-consumption survey conducted there in the summer of 1924 by the Pennsylvania Department of Agriculture, The Pennsylvania State College, and the United States Department of Agriculture.

²In this study the estimates for these two items averaged \$477 in Lancaster County; \$622 in Hempfield Township, Westmoreland County; 512 in Upper Burrell Township, Westmoreland County; \$475 in Crawford County; \$444 in Warren County; and \$414 in Wyoming County. Estimates for these same items on 7,738 farms in thirty different communities in the United States for the year 1918 to 1922 averaged \$518 per farm or \$130 per adult equivalent in the family. (U. S. D. A. Bul. No. 1338 pp. 8 and 9.)

at going wages in the community for farm labor of all work done by other members of the farmer's family, and the farmer's estimate of the value of his own time.¹

2. *The farm and labor income*, generally known in farm management studies as "farm income" represents what the farmer had for his labor and management and from the investment¹ in the farm in addition to a house to live in and such products of the farm as he and his family consumed after paying all expenses in operating the farm except taxes and interest and allowing for unpaid family labor at going wage rates for farm labor. This is not comparable with either net or gross income from town properties since it is the net return, above these rent and products consumed, from both the real estate and the farmer's own time.

3. *The current net cash income* is simply all money taken in, less all money paid out in connection with the farm business before taxes and interest¹ are paid. No personal expenses are included but only such expenses for labor, supplies, insurance, etc., as were made to conduct the farm business and to maintain the farm, no check being made on whether the farm was in better or in poorer condition at the end of the year than at the beginning nor whether more or less supplies or livestock were at hand than at the beginning of the year. This figure is valuable chiefly to see in what position the farmer and his family found themselves with respect to ready cash with which to pay taxes, interest on any borrowed money,² for automobiles for pleasure use, and for necessary living expenses.

Summary on Real Estate Incomes and Taxes

In Table 22 are shown the amount of taxes paid on different kinds of real estate in the six counties of the State where the study was conducted and what per cent the taxes were of the gross income and of the net income respectively on these properties.

¹The estimate of the value of the farmer's own time averaged \$1087 in Lancaster County; \$773 in Hempfield Township, Westmoreland County; \$402 in Upper Burrell Township, Westmoreland County; \$714 in Crawford County; \$698 in Warren County; and \$637 in Wyoming County. In Lebanon County no estimates were secured when the records were taken and \$600 was allowed on all farms in that county. When one considers the average wage paid for farm labor in each county and the fact that the farmer generally made his estimate on the basis of having a house to live in and farm products to use, while in the calculation of net income the farm was credited with these items, it is evident that the allowance for the farmer's time is from \$200 to \$500 too low. Since there may be some question as to whether a man's time is worth more if he has a large family than if he has only a wife, the writer has chosen to err on the conservative side and include nothing for house rent and products, with this explanation realizing that it is somewhat unfair to the farmer, but not knowing exactly how much.

²In no case is interest on any debt allowed among the expenses nor interest on the farmers own investment. The object is to figure the returns from the farm real estate as such and the taxes paid on it, regardless of who really owns it.

Table 22. Income and Taxes on Town and Farm Real Estate in Six Pennsylvania Counties.

Property Location of	Type of Property	Number in Sample ³	Average Taxes Paid	Per cent of Gross Income Taken for Taxes	Per cent of Net Income Before Taxes Are Paid Taken for Taxes ⁴
Lebanon city -----	Residence -----	35	\$49	11.7	14.9
Lebanon city -----	Business -----	2	1,066	17.1	20.3
Lebanon Co. -----	Tenant operated farm -----	55	187	18.4	24.6
Lebanon Co. -----	Owner operated farm -----	105	154	(¹)	33.9
Lancaster city -----	Large business block -----	3	1,932	11.8	15.1
Lancaster city -----	Small business block -----	4	273	9.7	12.7
Lancaster Co. -----	Residence -----	182	26	10.0	13.0
Lancaster Co. -----	Tenant operated farm -----	7	137	8.7	11.9
Greensburg -----	Owner operated farm -----	69	168	(¹)	16.7
New Kensington -----	Large business block -----	9	3,604	18.2	22.2
New Kensington -----	Residence -----	6	146	11.3	14.6
Hempfield Twp., -----	Business -----	8	1,291	15.3	19.0
Westmoreland Co. -----	Tenant operated farms -----	8	303	18.8	76.1
U. Burrell Twp., -----	Owner operated farms -----	23	204	(¹)	45.2
Westmoreland Co. -----	Owners operated farms -----	25	94	(¹)	263.0
Meadville -----	Business & Residence -----	8	130	11.2	14.3
Crawford Co. -----	Owner operated farms -----	40	117	(¹)	(²)
Tunkhannock -----	Business & Residence -----	30	80	15.2	18.6
Wyoming Co. -----	Owner operated farms -----	27	152	(¹)	24.0
Warren City -----	Business -----	13	1,339	31.0	34.5
Warren Co. -----	Owner operated farms -----	43	92	(¹)	102.2

¹Not calculated for owner operated farms since it was impossible to get a figure representing gross income from farm real estate.

²Minus \$33 before taxes of \$117 were paid.

³For distribution of the samples see the tables under each county.

⁴For comparison of Farm and Labor Income and Current Net Cash Income with Net Income see tables under each county.

A Comparison of the percentage of net income, before taxes are paid, required to pay the tax on real estate in different towns of the State shows a fair degree of uniformity except in the case of Warren where the tax averages about one and one-half times as large a portion of the net income as in most other towns studied. Comparing the town property with the farms in the same county shows a greater portion of income consumed by taxes on the farms than in the towns in every case. In Lancaster County the difference is very slight.¹ The difference is especially glaring in Crawford, Warren and Westmoreland Counties. In Wyoming County over thirty per cent larger a portion of the income on farms is required than in Tunkhannock, in spite of a higher rate of assessment in the town.

In Warren County about three times as large a portion of the income from farms as from town property was taken, in Westmoreland County from two and one half to thirteen times, and in Crawford County the farms had a minus net income before taxes were paid while town property paid less fifteen per cent of the net income in taxes.

¹One must bear in mind that the Lancaster County farms studied are considerably above the average of the farms in that county.

A comparison of the different sections of the State brings out more more forcefully the lack of equality in the tax burden. All town real estate studied averaged 22 per cent of the net income consumed by taxes. Lancaster and Lebanon averaged 15.7 per cent, while the farms in these two counties averaged 17.3 per cent.¹ All towns studied in the other four counties averaged 24.5 per cent of the net income for taxes while on the farms in these four counties an average of 55.1 per cent of the net income was required to pay the taxes. Not only do the rural sections pay relatively more taxes than the towns, but the schools and roads which these taxes secured were not on a par with those in the towns and cities, nor were the schools and roads any better in the rural sections where over half of the net real estate income was required to pay taxes than in the better farming areas of the State where the burden was much lighter.

A Comparison of Farm and Labor Income and Taxes

The per cent of farm and labor income taken for taxes does not admit of any direct comparison with any city data secured, therefore, it was not included in the table of state-wide summaries. The figures for this item can be seen in the tables under each county.

Farm and labor income can be most nearly compared to the annual profit before taxes are paid of a city merchant who owns the building in which he conducts his business and in which he lives not allowing any interest on the investment in the building, equipment or stock nor any salary for his own time. It may also be compared, in the case of a corporation, to all profits before taxes are paid; plus all salaries of officials, directors, managers, and foremen; plus all interest on indebtedness; plus all dividends paid on capital stock; plus all earnings put in reserve or into improvements and extensions. It also includes the labor performed by the farmer himself and should therefore include, in the case of the corporation, a portion of the wages paid. If all such merchants and all corporations paid 15 per cent of this amount in taxes in Lebanon County, 10 per cent in Lancaster County, 60 per cent in Westmoreland County,² 46 per cent in Crawford County, 12 per cent in Wyoming County, and 27 per cent in Warren County they would be carrying relatively the same tax burden as do the farmers of these respective counties.

Current Net Income and Tax Comparisons

Upper Burrell Township Westmoreland County, paid 22 per cent of the current net income from farms in taxes while in Hempfield

¹The reader should bear in mind the fact that farms used in Lancaster County were above the average of that county.

²Westmoreland County percentage is based on all owner operated farms studied in both Hempfield and Upper Burrell Townships. If the county has relatively more agriculture of the type found in Hempfield than of the type found in Upper Burrell, then the percentage for the whole county would be lower. For Hempfield alone it is 34 per cent. Upper Burrell alone can not be calculated on a percentage basis on account of a minus farm income of \$86.

Township 42 per cent of the current net income was required. When one compares this with the percentage of net income from farm real estate and with the percentage of farm and labor income required in these two townships, it becomes quite clear that this figure gives a quite illuminating view of the farm business and taxes.

In Upper Burrell Township 42 per cent of the total actual expense in operating the farm was for work performed by other members of the family for which no cash was paid out. In Hempfield Township only 12 per cent of the actual expense was for unpaid family labor. The minus farm and labor income of \$86 in Upper Burrell Township shows in what position these farmers would find themselves when time for paying taxes comes around if they paid the members of their families for the work done on the farm at going farm wages in the township. In Hempfield the farmer could pay for all the work done and require one-third of all that he and the farm together could produce to pay taxes leaving him two-thirds of the net earnings for himself and the farm or about \$100 for interest on any indebtedness, interest on his investment, and for his labor and management.

Farm and Family Earnings and Taxes

Another view that one may take is of the total earnings of the farm, the farmer, and all members of his family who worked on the farm and the percentage of this required for taxes. In Hempfield Township the farm, valued at \$10,025, the farmer, and his family earned a total of \$1034 and paid \$204 in taxes on the farm property. In Upper Burrell Township, the farm valued at \$6,000, the farmer, and his family earned \$661 and paid \$94 in taxes. In Crawford County the farm valued at \$7,620, the farmer and members of his family earned \$651 and paid taxes on an average of \$117. In Warren County, the farm valued at \$3900, the farmer and members of his family earned \$476 and paid \$92 in taxes. Thus the Hempfield Township farmer and his family had \$830, the Upper Burrell Township farmer \$567, the Crawford County farmer \$534, and Warren County farmer \$384 for interest on the investment, clothing for the family, automobiles for pleasure driving, doctor's bills and medicine and such food and fuel as the farm did not supply.

The comparison of the proportion of net income from farming property in different sections of the State that is required to pay the taxes shows how inadequate is the present system of State aid in equalizing the burden of taxation. Not only has the system failed to equalize the tax burden, but by the establishment of minimum standards for schools and highways without sufficient aids to the poorer sections to equalize tax burdens, it has tended to dictate

the amount of local tax which must be raised until ownership of farm property has been practically confiscated in many rural sections. These standards were no doubt low enough and the schools and highways none too good but the State assumes the authority of setting minimum standards it should also assume the burden of paying to maintain these standards all costs in excess of what the local people can bear and of right ought to bear in comparison with citizens of other sections of the State. The graduated scale for the payment of State aid is good so far as it goes but is not sufficiently graduated to extend the proper amount of aid to the poorer sections. While the Lancaster County farmer was compelled to pay from 12 to 17 per cent of the income which his farm earned last year in taxes, in Warren County he paid over 100 per cent, in Upper Burrell Township, Westmoreland County almost 275 per cent and in Crawford County he paid \$117 in taxes on farms that in the past year failed to earn operating expenses, insurance and maintenance.¹ While the farmers hold deeds to these farms, the real ownership of the property has been practically confiscated by the levying of taxes which consume not only all economic rent, but also considerable more. That the school directors and road supervisors whom these farmers elected levied the taxes makes the act no less confiscatory since the amount of taxes to be raised was determined largely by State authorities who were empowered to fix standards through the payment of State aid. Not only does the present system fail to equalize the tax burden between farmers of different sections of the State, but it also fails still further when rural and urban properties are compared.

While the lowest average of net income consumed in tax for the farms of any county was 11.9 per cent and the highest was infinity and the second highest 268.0 per cent, the lowest per cent for the urban properties in any county was 12.7 per cent and the highest was 34.5 per cent and the second highest 22.2 per cent so that while the towns own for all purposes of income from one-eighths to one-third of the urban properties the township authorities own from one-eighths to the entire farm property and in addition to this have exercised the right in some counties to exact in taxes a portion of the pittance which the owner received for his labor.

No doubt the incomes on these farms were lower during the last year than in the years from 1915 to 1920, and absolutely final conclusions should not be drawn from one year's income. They were, however, probably not any lower in most cases than the average of the last five years.

One of the outstanding weaknesses of the general property tax levied on the basis of selling value is here brought out very forcibly,

¹The income was minus \$33 before taxes were paid.

especially where this form of tax is the sole source of maintenance for vital government functions such as the schools and the highways. In times of depressions when values decline, the need for taxes compels an ever increasing tax rate which still further diminish the selling value and so on until a condition is reached like the one found in some of the rural sections of the counties studied. This condition if allowed to continue for any great length of time is sure to result in the decadence of all social life in those communities and in the ultimate abandonment of the sections. Even granting that some of these farms are too poor in natural resources to warrant their continued use for farming purposes, the economic and social hardships incident to abandonment by this process are a matter that merits the concern and wholehearted interest of the State and Federal Governments.

To pauperize the present occupants of these farms for the purpose of building school houses and roads cannot be a wise procedure unless permanency in the need for these facilities can be foreseen.

The last five years have been very difficult years for the farmer. Probably the next five years will bring sufficient improvement in the farmer's economic status to partially relieve the most glaring inequalities between the farmer and the town property owner in the present system of tax payment. It is not to be expected, however, that this can possibly erase these inequalities or any major portion of them.

Even if it could, this condition points out the very erroneous character of a tax based on the capital value of property rather than on the income. The value of land depends on the expected future income and while the income at present is very low. A tax based on capital not simply on the present income. Thus the value may be quite high value may therefore easily reach heights which exceed the total income in periods of economic readjustment such as agriculture is undergoing. Since a tax on value is so much easier to administer than one based on income it is not likely that the tax on real estate can soon be placed on an income basis. The facts brought out by this study would indicate that a much more searching study along this line should be made with a view to finding some basis for the distribution of State aid on an income basis so that glaring inequalities between incomes and taxes might be corrected from year to year by this process.

If the future good of the State is served by the continued habitation of vast portions of the present farming areas of the State, if the cities are interested in the continued outpouring of farm products from these areas, and if the children born into those areas are to be educated so as to enable them to become most useful citizens in the future, then it becomes a matter of intense interest to State author-

ities and to urban dwellers that some measure of relief be accorded the tax burdened citizens of those areas. In working out an adequate and equitable system for the raising and distribution of revenue for local and for State purposes it is highly important that a long time view be taken.

Areas that appear rather too poor for farming purposes today when we are still influenced by the high scale of agricultural production to which the country was brought during the war may be needed for the protection of food and raw materials for clothing in the not too distant future. To hinder those areas in their recovery from the agricultural depression by forcing upon them taxes which are confiscatory must be unwise in the extreme and may lead to deterioration and abandonment which means great waste too the State and to society as a whole.

Some of these sections could not be made prosperous if its citizens were relieved of all taxes and State or Federal aid should never be extended to such an extent as to constitute a subsidy for the continued occupancy of sections that are economically unprofitable to use. On the other hand the citizens of these poorer areas should not be penalized to the extent of paying a larger share of their income in taxes for the support of education and highways than those of other sections pay for these purposes since these institutions are maintained for the welfare of the State, the Nation and our civilization as a whole.

Even in those areas which the onward march of agriculture and transportation had made permanently unsuited for farming a more humane plan than the one that is now in operation ought to be possible.

LEBANON COUNTY

Table 23. Comparison of Incomes and Taxes on City Real Estate and on Farms in Lebanon County, Pennsylvania.

Type of Property	Location of Property	Number of Samples	Average Tax Paid	Ratio of Taxes to Income				
				Per Cent of Gross Income	¹ Per Cent of Net Income	Range in per cent of Net Income	Per cent of Farm and Labor Income	¹ Per cent of Current Net Cash Income
Business and Residence -----	All Wards in Lebanon	37	104	14.2	17.5	9.9 to 26.7	(²)	(²)
Tenant Operated Farms -----	15 Twps. in the County	55	187	18.4	24.6	8.3 to 72.0	(²)	(²)
Owner Operated Farms -----	15 Twps. in the County	105	154	(²)	33.9	10.1 to (³) 133.5	14.6	11.1

¹In all cases of net income, the net before taxes are paid is used.

²Term does not apply or data is not available.

³Does not include four townships where the net income on 14 out of 23 farms studied was minus before taxes were paid.

The estimated value of the tenant operated farms ranged from \$4,000 to \$23,450 with an average value of \$10,313. The highest rate of tax in proportion to income was on a \$4,400 farm and the second highest on the \$23,450 farm both in North Lebanon Township. The lowest rate was found on a \$15,000 farm in North Cornwall Township and the second lowest on a \$7,000 farm in Bethel Township. The average of all the tenant operated farms studied was 141 per cent of the average of all the city properties studied.

The owner operated farms had an estimated value of from \$2000 to \$30,000 and averaged \$9,722. The average rate of tax collected on these farms in almost twice (194 per cent) that on the city properties on which data were secured.

LANCASTER COUNTY

Table 24. Comparison of Incomes and Taxes on City Real Estate and on Farms in Lancaster County, Pennsylvania

Type of Property	Location of Property	Number of Samples	Average Tax Paid	Ratio of Taxes to Income				
				Per Cent of Gross Income	¹ Per Cent of Net Income	Range in per cent of Net Income	Per cent of Farm and Labor Income	¹ Per cent of Current Net Cash Income
Business -----	Lancaster 1st, 2nd., & 3rd Wards -----	7	984	11.3	14.6	7.7 to 24.0	(²)	(²)
Residence -----	Lancaster 9 Wards -----	182	26	10.0	13.0	1.9 to 33.8	(²)	(²)
Tenant Operated Farms -----	5 Twps. in the County -----	7	137	8.7	11.9	6.4 to 50.9	(²)	(²)
Owner Operated Farms -----	31 Twps. in the County -----	68	168	(²)	16.7	5.6 to 147.8	10.4	9.7

The seven tenant operated farms had an estimated average value of 15,976. The highest per cent of net income taken was on a \$14,860 farm and the lowest on a \$25,800 farm and the second lowest on a \$15,600 farm.

From the data in table 24 one would be led to infer that, while there are enormous variations in the per cent of net income taken both in the city and in the rural sections, the farm average is only slightly higher than the average in the city. It must be remembered, however, that the 76 farms used are above the average of all farms in the county while the city properties probably represent a fair average of all city property.

The 69 farms operated by the owner ranged in value from \$5,000 to \$31,600 and averaged \$15,250. They were assessed at 56.5 per cent of this value.

¹Net income before taxes were paid.

²Term does not apply or data not available.

WESTMORELAND COUNTY

Table 25. Comparison of Incomes and Taxes on City Real Estate and on Farms in Westmoreland County, Pennsylvania.

Type of Property	Location of Property	Number of Samples	Average Tax Paid	Ratio of Taxes to Income				
				Per Cent of Gross Income	¹ Per Cent of Net Income	Range in per cent of Net Income	Per cent of Farm and Labor Income	¹ Per cent of Current Net Cash Income
Large Business Blocks -----	Greensburg --	9	3,604	18.2	22.2	-----	(²)	(²)
Business -----	New Kensington	8	1,291	15.3	19.0	-----	(²)	(²)
Residence -----	New Kensington	6	146	11.3	14.6	-----	(²)	(²)
Tenant Operated Farms -----	Hempfield Township	8	303	18.8	76.1	-----	(²)	(²)
Owner Operated Farms -----	Hempfield Township	23	204	(²)	45.2	-----	33.9	42.2
Owner Operated Farms -----	Upper Burrell Twp.	25	94	(²)	268.0	-----	(³)	22.3

In sampling the farms in Westmoreland County it was thought that a rather full sample from one of the best farming townships and an equally complete sample from one of the poorer would be more valuable than the same sized sample selected from the entire county.

Hempfield Township was selected as typical of the better farming section in the county and Upper Burrell to represent the portion of the county least adapted to farming. Hempfield Township surrounds Greensburg, the land is high in fertility, good markets are close at hand, hard surfaced roads traverse the township in all directions and farm values are very high. The average estimated value of all farms studied was \$10,850. Upper Burrell Township, located in the northwestern part of the county has much land that was formerly farmed now growing up in brush. Very few people are trying to make a living from the farm exclusively. Most of the farms have some income from gas wells or leases. This income was included in the income from the farm. The average estimated value of the farm was \$6000.

Due partly to the scarcity of rented residences in Greensburg it was impossible to secure a sample of this kind of property sufficiently large to be typical of the town. The gross income on the nine large business buildings is \$177,810. According to data secured from the owners the net income is \$146,200. This amounts to 64 per cent of the gross income and checks quite closely the two-thirds estimate used in some other counties. Similar data on the properties in New Kensington showed that 65.2 per cent of the gross income from the properties studied there was net.

¹Net income before taxes were paid.

²Term does not apply or data not available.

³The average farm and labor income was minus \$86 before taxes were paid.

CRAWFORD COUNTY

Table 26. Comparison of Incomes and Taxes on City Real Estate and on Farms in Crawford County, Pennsylvania.

Type of Property	Location of Property	Number of Samples	Average Tax Paid	Ratio of Taxes to Income				
				Per Cent of Gross Income	¹ Per Cent of Net Income	Range in per cent of Net Income	Per cent of Farm and Labor Income	¹ Per cent of Current Net Cash Income
Business and Residence -----	Meadville ----	8	\$130	11.2	14.2	-----	(²)	(²)
Owner Operated Farms -----	8 Twps. in County	40	117	(²)	(³)	13.8 to (⁴)	45.7	39.5

The farms on which records were taken had an average value of \$7,620 and were assessed for an average of \$2,710 or 35.6 per cent of the owner's estimated value. These farms were selected to be a fair sample of the agriculture of the county outside of the oil area around Titusville.

The most outstanding discrepancy between the proportion of income taken for taxes on farms and in the town found anywhere in the six counties studied was found in Crawford County. While the real estate in the City of Meadville pays 14.3 per cent of the net income, before taxes are paid, in taxes the average of all farms studied lacked \$33 of paying all operating expenses other than taxes and the average tax paid on these farms was \$117. The owners of these farms, therefore, paid a penalty of \$150, on an average, for the privilege of owning a farm that gave them employment at an annual nominal wage of \$714 out of which he paid a nominal sum of \$475 to the farm for house rent and the products which he and his family consumed and received no interest on the investment in the farm and equipment.

WARREN COUNTY

Table 27. Comparison of Income and Taxes on City Real Estate and on Farms in Warren County, Pennsylvania.

Type of Property	Location of Property	Number of Samples	Average Tax Paid	Ratio of Taxes to Income				
				Per Cent of Gross Income	¹ Per Cent of Net Income	Range in per cent of Net Income	Per cent of Farm and Labor Income	¹ Per cent of Current Net Cash Income
Business -----	Warren Boro.	13	\$1,339	31.0	34.5	19.1 to 67.4	(²)	(²)
Tenant Operated Farms -----	4 Twps. in the County	5	113	32.6	72.9	15.5 to (⁵)	(²)	(²)
Owner Operated Farms -----	13 Twps. in the County	43	92	(²)	102.2	6.8 to (⁵)	26.8	16.3

¹Net income before taxes were paid.²Term not applicable or data not available.³The average net income on the farms was minus \$33 before taxes were paid.⁴The largest minus net income was \$2004 and the tax on this farm \$116.⁵Percentage is infinity on farms with a minus net income.

The 43 owner operated farms had an average estimated value of \$3,900. They ranged in value from \$1,150 to \$14,000. The average assessment was \$1,760 or 45 per cent of the owner's estimate of the actual value.

One farmer with his farm and family earned \$5,695 and paid \$270 taxes on the farm property. Another farm, farmer and family had combined earnings of minus \$1,460 and paid \$105 in taxes. These extremes were not closely approached by any other farms and are, therefore, less significant than the averages. While the taxes in the City of Warren are very high, the farmers pay almost three times as large a portion of the income earned by their property for taxes as do the city property owners. Furthermore, a comparison of these figures with those for Lebanon and Lancaster Counties furnishes considerable food for thought to those who are interested in working out an equitable system for the distribution of State aid for the public school system and for highways.*

WYOMING COUNTY

Table 28. Comparison of incomes and Taxes on City Real Estate and on Farms in Wyoming County, Pennsylvania.

Type of Property	Location of Property	Number of Samples	Average Tax Paid	Ratio of Taxes to Income				
				Per Cent of Gross Income	¹ Per Cent of Net Income	Range in per cent of Net Income	Per cent of Farm and Labor Income	¹ Per cent of Current Net Cash Income
Business -----	Tunkhannock	2	\$79	19.4	22.5	15.3 to 24.8	(2)	(2)
Business and Residence -----	Tunkhannock	8	134	13.5	16.8	11.8 to 27.2	(2)	(2)
Residence -----	Tunkhannock	20	58	16.5	19.8	14.9 to 26.1	(2)	(2)
Owner Operated Farms -----	⁴ Twps. in the County ³	27	152	(2)	24.0	-----	12.1	11.3

The average per cent of net income from all the borough real estate studied that was required to pay the taxes was 18.6 as compared with 24.0 for all farms studied.

The farms ranged in value from \$2,200 to \$15,000 and averaged \$5,700 according to the estimate of the owners. They were assessed for \$2,010 or 35 per cent of the estimated value.

The thirty borough properties had a combined value of \$147,162 and were assessed for \$54,450 or 37 per cent of the estimated value. In spite of a slightly lower rate of assessment in the townships, about one-third larger portion of the net income from farm real estate is required to pay taxes than from town real estate.

*In this comparison attention should again be called to the fact that the Lancaster County farms studied are above the average of those in the county but not enough to account for this enormous discrepancy in the percentage of income taken for taxes.

¹Net income before taxes were paid.

²Term not applicable or data not available.

³Eleven from Clinton, one from Lemon, five from Washington, and ten from Tunkhannock.

Relative Share of the Total Tax Burden in Pennsylvania Carried by Agriculture

According to figures published by the National Industrial Conference Board¹ for the year 1924 the total income in Pennsylvania to all its citizens was \$5,928,360,000 while taxes paid by the citizens of this state were as follows: Federal \$313,214,000, State, \$42,454,500, and Local \$252,824,000.

According to these figures there was paid in federal taxes 5.28 percent of the total income and 4.98 percent for state and local purposes or a total of 10.26 percent of all the income for all direct taxes.

Agriculture pays practically none of the federal or state² taxes except automobile licenses and gasoline tax but pays so large a share of the local taxes that its burden for all direct public revenues is relatively much heavier when compared with the income in agriculture than is the burden on the citizens of the state as a whole.

The total net income to agriculture for the year 1925 before taxes were paid was about \$56,000,000³ and the total taxes paid on farm property was \$21,489,600.⁴ The taxes are therefore 38.37 percent of the total earnings from farm property. This figure is not to be compared with the 10.26 percent of all income in Pennsylvania paid for taxes since the total income of almost 6 billions of dollars includes personal as well as property incomes while in calculating the net income from farm property the farmer is allowed the prevailing wage for farm hired man in the community for his labor on the farm. If we add the personal earnings of the farmer to the net income from farm property and deduct the interest paid on mortgage debt on farms in the state, there was required of the total income of the farmer for his time and from his investment in the farm business 11.6 percent to pay the taxes levied on farm property in 1925.

Comparing this with the 10.26 percent for all people in the state it is evident that the farmers in spite of the fact that they pay relatively an almost negligible share of the state and federal taxes, pay on an average a slightly larger share of their income in direct taxes than the average for the whole state, farmers included. Not only do they pay a larger percentage of the total income in taxes but they pay it out of a percapita income that is roughly only

¹Cost of Government in the United States, pages 60 and 61.

²The so called "state tax" of 4 mills is not a state tax any longer but goes entirely to the county.

³See page 54.

⁴The total figure for taxes paid on farm property was derived by totaling all the assessments on farm property for each political division in the state, and multiplying each of these by the millages for all taxes which applied in that political division and then totaling these results for the entire state.

about one half that of the state average. From the stand point of ability to pay these low percapita incomes should be taxed at a lower rate than incomes that are larger percapita.

Table 29. Comparison of Taxes Paid by Agriculture and Mining with all Property Taxes Paid in Each County.

	Per Cent of total taxes paid by agriculture	Per Cent of total school taxes paid by agriculture	Per Cent of total county taxes paid by agriculture	Per Cent of total taxes paid by coal lands and mining property	Per Cent county tax is of all taxes levied
Adams	47.8	48.6	47.4		33.2
Allegheny	0.9	1.4	1.4	.8	18.2
Armstrong	21.5	20.7	23.7	10.52	19.6
Beaver	8.5	6.7	11.7	.4	24.3
Bedford	49.9	48.0	48.1	4.7	24.0
Berks	13.5	11.4	10.5		20.7
Blair	8.9	9.1	7.9	.3	24.3
Bradford	51.5	43.5	57.9	.02	34.3
Bucks	33.7	32.9	31.5	.1	23.0
Butler	28.0	28.1	25.8	1.1	33.8
Cambria	8.1	8.4	8.2	14.9	17.2
Cameron	7.8	6.9	8.2	.4	23.8
Carbon	5.2	4.9	5.1	23.8	19.5
Centre	32.2	34.4	38.1	.8	20.5
Chester	31.8	33.5	30.1		18.4
Clarion	45.1	45.1	44.8	3.4	34.7
Clearfield	8.5	8.2	9.6	7.1	26.9
Clinton	17.0	15.6	19.1	.6	21.2
Columbia	17.9	15.2	16.4	28.5	18.0
Crawford	37.7	37.9	38.2		25.7
Cumberland	28.7	27.1	32.8		21.8
Dauphin	7.0	6.6	8.3	1.1	19.1
Delaware	5.3	5.5	4.9		26.7
Elk	6.2	6.4	7.1	2.5	19.1
Erie	17.7	19.1	17.3		22.9
Fayette	8.9	9.0	8.5	51.9	22.5
Forest	15.3	15.8	13.7		31.9
Franklin	39.4	39.8	36.1		18.1
Fulton	66.9	67.3	65.0		25.7
Greene	21.3	20.5	21.6	56.0	25.5
Huntingdon	26.6	25.0	28.0	4.1	27.0
Indiana	15.3	14.5	16.6	18.1	17.3
Jefferson	18.7	19.9	18.9	4.6	22.1
Juniata	58.9	62.1	56.3		25.7
Lackawanna	0.7	0.8	0.8	12.7	14.7
Lancaster	30.8	27.7	22.6		14.0
Lawrence	12.2	12.6	11.1	.81	21.3
Lebanon	16.1	15.0	14.1	.8	14.4
Lehigh	7.8	8.0	6.2		13.8
Luzerne	1.6	1.5	1.4	36.1	24.3
Lycoming	14.2	14.8	12.5		24.8
McKean	11.6	11.6	10.8		31.5
Mercer	16.3	14.0	19.9	.18	28.9
Mifflin	23.1	23.0	25.9	.6	20.7
Monroe	18.9	20.0	16.6		31.8
Montgomery	16.6	17.8	9.9		18.8
Montour	35.7	33.9	40.1		19.9
Northampton	9.0	8.6	8.5		24.3
Northumberland	6.2	5.7	8.8	37.8	16.0
Perry	45.7	45.0	46.3		26.8
Philadelphia	0.5	0.8			4.4
Pike	9.7	9.7	7.9		17.6
Potter	19.3	18.3	19.3		34.3
Schuylkill	4.3	3.2	4.3	48.0	25.1
Snyder	51.9	54.2	49.5		22.0
Somerset	22.0	20.6	22.0	19.4	21.0
Sullivan	43.4	46.1	42.0	1.5	26.2
Susquehanna	40.5	38.6	43.6	3.0	23.1
Tioga	50.3	49.0	49.8	1.8	29.2
Union	43.6	41.8	47.7		19.3
Venango	10.0	8.7	9.1		24.8
Warren	19.0	17.8	18.5		27.9
Washington	12.7	11.5	14.4	36.9	25.6
Wayne	45.3	42.9	43.7	.8	25.4
Westmoreland	11.4	11.1	11.8	20.9	19.3
Wyoming	45.2	45.6	39.1		26.4
York	25.5	24.8	25.2		28.1
Pennsylvania	7.1	7.1	9.5	7.0	16.5

Table 30. Relation of Farm Taxes to Agricultural Production and to Capital Invested in Agriculture by Counties.

	Gross Value of All Farm Products	Taxes Paid on Farm Property	Value of Farm Land and Buildings	Total Capital Invested in Farming	Ratio of Taxes to Gross Value of Farm Products
Adams	6,584,329	284,193	17,740,740	23,709,813	4.3
Allegheny	6,099,693	645,115	47,868,735	53,479,596	10.5
Armstrong	3,979,422	353,741	16,270,561	20,748,835	8.9
Beaver	3,110,904	318,285	14,348,498	17,488,857	10.3
Bedford	4,407,321	263,679	13,647,671	18,811,632	6.0
Berks	12,362,226	659,787	33,343,217	44,766,614	5.4
Blair	3,095,762	201,886	10,397,692	13,185,617	6.5
Bradford	9,468,253	613,600	21,307,060	30,561,958	6.5
Bucks	9,528,524	667,932	39,666,885	50,535,921	7.0
Butler	5,257,077	594,174	21,511,865	27,399,267	11.3
Cambria	3,059,124	466,297	11,713,882	14,813,332	15.2
Cameron	198,738	10,048	860,400	1,141,844	5.0
Carbon	1,315,701	75,505	5,167,350	6,395,654	6.2
Centre	4,150,850	234,746	13,855,126	18,269,899	5.6
Chester	11,669,224	890,673	53,123,138	65,186,635	7.6
Clarion	2,992,419	282,328	13,817,765	17,704,081	9.4
Clearfield	3,315,585	154,136	11,591,591	14,502,085	4.6
Clinton	1,692,599	99,688	5,644,420	7,070,315	6.9
Columbia	4,161,989	221,487	10,113,987	14,057,439	5.3
Crawford	7,840,290	603,845	28,286,287	36,707,220	7.7
Cumberland	6,574,841	310,922	21,856,730	27,306,695	4.7
Dauphin	5,136,546	282,863	15,172,264	19,928,819	5.5
Delaware	2,146,288	398,131*	15,266,445	17,529,188	18.5*
Elk	839,098	45,435	4,292,110	5,122,987	5.4
Erie	8,523,891	687,018	42,312,711	49,828,712	8.0
Fayette	3,692,974	482,839	19,918,413	23,825,997	13.1
Forest	370,574	19,159	1,088,897	1,447,935	5.2
Franklin	8,583,434	415,698	28,765,688	36,466,231	4.8
Fulton	1,749,358	71,416	4,160,358	5,841,665	4.1
Greene	3,808,108	292,818	23,892,712	28,309,167	7.7
Huntingdon	3,263,484	169,422	8,955,482	12,137,968	5.2
Indiana	4,610,030	237,521	18,134,787	22,874,265	5.2
Jefferson	2,584,742	179,761	10,995,690	14,069,105	7.0
Juniata	2,392,836	104,448	6,670,310	9,213,487	4.0
Lackawanna	2,832,273	74,404	11,056,619	13,477,607	2.6
Lancaster	24,997,829	983,428	91,118,245	111,433,082	3.9
Lawrence	3,373,852	281,508	17,817,993	21,625,216	8.3
Lebanon	5,270,298	263,289	13,415,789	17,640,064	5.0
Lehigh	5,977,801	329,954	19,311,948	24,729,863	5.5
Luzerne	4,557,186	234,940	15,221,628	19,115,651	5.2
Lycoming	5,111,586	211,963	16,533,467	22,054,089	4.1
McKean	1,488,669	158,777	6,747,858	8,312,230	10.7
Mercer	6,170,373	414,839	22,257,348	28,292,595	6.7
Mifflin	2,444,197	135,109	7,564,868	9,810,471	5.5
Monroe	2,005,515	125,668	5,990,625	7,911,261	6.3
Montgomery	8,018,571	1,229,883*	40,409,205	49,304,985	15.3*
Montour	1,311,326	64,011	3,670,885	5,051,517	4.9
Northampton	5,558,532	349,753	15,311,260	20,778,089	6.3
Northumberland	4,127,596	208,235	13,523,576	17,330,771	5.0
Perry	3,435,076	137,990	7,100,892	9,865,890	4.0
Philadelphia	806,793	416,540*	16,279,200	17,040,879	51.6*
Pike	669,447	16,870	4,356,250	4,990,305	2.8
Potter	2,835,606	65,220	6,975,510	9,248,237	2.3
Schuylkill	5,120,943	269,583	13,713,287	17,947,376	5.3
Snyder	3,509,981	117,510	6,905,521	9,750,914	3.3
Somerset	4,032,154	367,115	23,259,880	29,569,490	9.1
Sullivan	1,061,438	63,554	2,611,285	3,651,123	6.0
Susquehanna	6,165,268	302,538	14,290,949	20,548,922	4.9
Tioga	6,755,133	361,129	14,843,022	20,649,228	5.3
Union	2,566,804	119,581	7,021,145	9,302,941	4.6
Venango	2,096,381	163,247	7,829,706	10,763,394	7.8
Warren	2,748,921	209,503	9,224,351	12,048,052	7.6
Washington	6,323,802	598,321	35,908,403	43,646,825	9.5
Wayne	4,245,408	245,846	13,182,439	17,722,662	5.8
Westmoreland	7,200,948	868,120	32,186,469	39,639,523	12.0
Wyoming	2,268,738	107,655	8,032,850	10,181,570	4.7
York	14,890,238	654,884	41,255,798	54,522,204	4.4
Pennsylvania	318,705,037	21,489,623	1,176,657,548	1,488,637,604	6.7

The comparison already made shows how the farmer fares in relation to the state average. This however is far from telling the real story of unequal tax burden as it exists in the state today. According to the figures compiled by Dr. King¹ the burden on the non farmers is far from being equally distributed. Such groups as manufacturing, construction and general service bear a much smaller share of state taxes than the average, and agriculture when compared with these is probably taxed fully two or three times as heavy while the most heavily taxed non—farm groups may approach quite closely the burden carried by agriculture.

²See Part II.

PART 2

Wealth, Income and State Taxes Paid By Various Groups of Businesses in the State

By CLYDE L. KING

University of Pennsylvania.



WEALTH, INCOME AND STATE TAXES PAID BY VARIOUS GROUPS OF ENTERPRISES IN THE STATE¹

The wealth and income of the largest industrial group in Pennsylvania (the manufacturing group) is practically exempt from paying any share of the State taxes.

The aim of this study is to ascertain the share of the taxes paid into the State Treasury of Pennsylvania by each of the main industrial groups.

The basis for the classification of the industrial groups is the same as that given in the Annual Statistics of Income published by the Federal Bureau of Internal Revenue.²

Table 31 presents a picture of the total wealth, total income and total State taxes paid by each of these main industrial groups. The figures are for 1923 except where figures for 1923 were not available and in that case the best available figures for 1922 were used. The estimate of agricultural wealth and income is for 1925, as that year was more nearly normal. The outstanding fact is that the industrial group of greatest wealth in the State is practically exempt from supporting the State government. In expenditures by the State this industrial group profits most because of the large

INDUSTRIAL GROUPS

Agriculture :

Farming

Related Industries

Mining and Quarrying :

Coal

Metal mining

Oil and Gas

Quarrying

All other mining and quarrying.

Manufacturing :

Food products

Textile products

Leather products

Rubber products

Lumber and wood products

Paper, pulp, and products

Printing and publishing

Chemicals and allied substances

¹In 1923 the Pennsylvania State Tax Commission asked the Secretary of the Commonwealth to make a study as to who paid the taxes in Pennsylvania. A progress report was made to the Commission, but the report has not been completed until this time.

²Industrial groups given herewith are those adopted by the Industrial Revenue Bureau.

Stone, clay, and glass
 Metal and metal products
 All other manufacturing

Construction :

Transportation and other public utilities :

Steam railroads
 Electric railroads
 All other railroads and other combinations
 Water transportation
 Local transportation, cartage and storage
 Electric light and power companies
 Gas companies
 Telephone, telegraph and radio companies
 Water works
 Storage companies
 All other public utilities

Public Service (Called General Service in this Report)

Domestic Service—hotels, etc.
 Amusements—theaters, etc.
 Business service
 Educational—colleges, museums, etc.
 Curative—hospitals, asylums, etc.
 Legal—lawyers, patent attorneys, etc.
 Engineering, architects, civil, etc.
 All other service.

Finance, banking, insurance, etc.

National banks
 State banks
 Private banks
 Trust companies or trust and savings banks
 Stocks and bonds, loan, realty holding, etc.
 Insurance companies
 All other finance not included above.

Combination, predominant industry not ascertainable

Concerns in liquidation

Inactive concerns

Exempt corporations other than insurance companies.

Table 31. Wealth, Income and State Taxes by Major Industrial Groups in Pennsylvania, 1922-1923

Industrial Groups	Wealth	Income	State Taxes	Ratio Income to Wealth	Ratio State Taxes to Wealth	Ratio Taxes to Income
Agriculture ⁴ -----	\$1,500,000,000	\$56,000,000	Negligible ⁵	3.73	Negligible	
Mining & Quarrying --	1,500,000,000	89,000,000	\$5,268,358	5.93	.35	5.9
Manufacturing ¹ -----	6,750,000,000	526,000,000	2,566,364	7.78	.04	.55
Construction ¹ -----	125,000,000	22,000,000	90,000	17.50	.07	.40
Transportation & Public Utilities ^{1 2} -----	3,025,000,000	217,000,000	15,193,485	7.17	.48	7.01
Trade ² -----	1,885,000,000	185,000,000	6,612,476	9.84	.35	3.56
General Service ² -----	1,085,000,000	110,000,000	409,173	10.10	.04	.37
Finance ² -----	2,030,000,000	244,000,000	9,701,911	10.59	.47	3.97
Miscellaneous ² -----			1,079,950			
Additional Taxes on Business Paid Through Mfg. Corps. ³ -----			1,232,790			

¹1922.²1923.³This is the amount of capital stock tax paid by manufacturing corporations on the stock of non-manufacturing businesses. It is not a tax on manufacturing.⁴1925.⁵Agriculture pays practically none of the federal or state taxes except automobile licenses and gasoline tax but pays so large a share of the local taxes that its burden for all direct public revenue is relatively much heavier when compared with the income in agriculture than is the burden on the citizens of the state as a whole.

appropriations to hospitals, to schools, to welfare institutions, to education, to the protection of person and property. While receiving in full the benefits of taxes paid by others it pays practically none of those taxes.

The estimate of the wealth invested in manufacturing in Pennsylvania and the estimate of the income is conservative. The share of state taxes borne by the wealthiest industry in the State is therefore even less than that reflected by these figures. The taxes not paid by the self-exemption of the manufacturing industry must be borne by other industries.

The most commonly accepted measures of ability to pay are wealth and income. Accordingly table No. 31 given above shows the relation of state taxes to both wealth and income. The figures for net income are before the payment of any taxes.

The ratio of income to wealth varies from 3.73% in agriculture to 17.5% for construction. The more usual return seems to range from 8% to 10% as shown for manufacturing, trade, public service and finance.

The year 1922 was particularly bad for mining but that year was a very good one for construction. The figures for any one year will not reflect exactly the state of affairs in that industry for a period of years but the figures are sufficiently close to actualities to serve as a basis for deciding in general what industrial groups pay the taxes into the State Treasury of Pennsylvania.

The industrial groups of the State that are particularly called on to make up the deficit in State income due to exemption of the manufacturing group are especially: transportation and public utilities; mining; the financial business and trade.

Consideration must be given to the fact that the real estate owned by the railroads and public utilities are exempt from local taxes. This gives justification for a higher state tax on such businesses. But it does not justify calling on these businesses to pay thirteen times the taxes another industrial group of greater wealth pays in proportion to income.

The proportion of state taxes paid by the mining and quarrying industry is large chiefly because of the tax on anthracite coal. One justification for this special tax is the monopolistic character of the business. But whatever may be said for that tax nothing can be said for taxing the mining business ten times as heavily as the manufacturing business in proportion to income.

Much can be said for the retail and wholesale mercantile license taxes because they are in lieu of local assessments on the value of such goods. But that is no reason why another and greater section of the state's earning power should be given the special privilege of tax exemption.

One other outstanding fact brought out by these studies is the lighter tax burden on urban earning power than on agricultural earning power. The property of the farmer is as evident as land and buildings and livestock. Urban earning power is to a considerable extent in the skill of physicians, the learning of lawyers, the art of advertisers, none of which find expression in physical wealth that is so obvious and inescapable as the wealth of the farmer. Mr. Weaver's studies show that not even the physical properties of other industries are taxed equitably with agriculture. The growing intangible wealth and earning power of the state is escaping its fair share of the tax burden which must, therefore, fall all the more heavily on farmers in the country and home owners in the city.

One industrial group we have called general service. This service includes hotels, theaters, lawyers, doctors, architects, engineers and other similar services. The income of this group is high in proportion to its wealth. This group pays a slight fraction of its earning power to the State. The construction industry shows the highest profits in proportion to wealth invested yet it too pays a slight fraction of its earning power as state taxes. The professions at least are not taxed on local real estate in proportion to their ability to pay. There is little direct relationship between the income of a lawyer and the rent he pays in a downtown office building. The intangible earning power of city dwellers is escaping its share

of taxes; but little the farmer has escaped the eye of the most somnolent of tax gatherers; while the little red school house and the muddy country lane call loudly for upkeep. That is why state school subsidies should bear a direct relation to the value, the assessment and the tax rate of local school districts, as emphasized by Mr. Weaver in Part I of this report.

The pages following give the methods used in estimating the wealth, income and state taxes of each of these industrial groups. Certain taxes were not apportioned because they seemed to fall by their nature fairly equitably among all groups. Such is the gasoline tax, the automobile license tax, hunters license fees, etc.

Acknowledgement must be made particularly to Professor E. M. Patterson of the University of Pennsylvania for aid in these estimates and to Auditor General Martin for making it possible to tabulate certain returns as to invested capital, income and state taxes found only in his office.

Messrs. Charles P. White, W. C. Plummer, Edward B. Logan and Wm. Blaisdel gave invaluable assistance in research and statistical work.

WEALTH, INCOME AND TAXES ON AGRICULTURE IN PENNSYLVANIA¹

Three methods were used to calculate the net income of Pennsylvania farms in 1925. The year 1925 was chosen because it was believed to be more nearly normal than the years 1922 or 1923.

Method 1:—The figures for 1921² were taken as the basis for the calculation of gross agricultural income. They are as follows:

Dairy products	\$ 92,642,000
Beef and Veal	15,558,000
Sheep, goats, and swine	20,246,000
Poultry and eggs	42,148,000
All farm crops	286,322,000
Wool and mohair	797,000
Honey and Wax	386,000
Dairy cows and for town use	727,000
Land for city use	3,000,000
	<hr/>
	\$461,826,000

The above items were multiplied by the estimates of the Pennsylvania Department of Agriculture of the value of products, December 1, 1924, and divided by their estimate for the value December 1,

¹By F. P. Weaver of Pennsylvania State College.

²Page 205 of "Income in the Various States" by the National Bureau of Economic Research.

1921. Items that were not covered by the department's estimates, such as land for city use, were put in at the same figures as in 1921. This process gave an estimated total gross income of \$529,717,000.

The farm expenses for 1921¹ were taken as a basis and converted into 1924 values by means of index numbers of the items involved. Farm implement values were multiplied by 186 and divided by 176.² Fertilizer expense was taken the same as in 1921. Business use of autos was also charged at the 1921 figures. For feed cost 111% of the 1921 cost was used from an index of feed prepared by the author. Seed was charged at 110% of the 1921 figure, an estimated increase derived from a 1.5% increase in potato prices and a 24% increase in clover seed prices, grass seed and seed potatoes being the two main items in the seed bill. Binder twine was put in unchanged from 1921. Harness and saddle expense was left unchanged. Business buildings including insurance were figured at 189.9/176.6 of the 1921 expense on the basis of index numbers of building costs published by the United States Department of Agriculture. Interest on farm loans from banks and merchants was left unchanged. Horses and mules purchased were calculated at 62.5/79.0 of the 1921 expense for this item on the basis of index numbers of horse prices in Extension Circular 101, The Pennsylvania State College. Farm wages were charged at 112.5% of what they cost in 1921 on the basis of index numbers of farm wages, United States Department of Agriculture. Salaries of Managers were put in at the same ratio of the 1921 cost as wages.

Taxes paid were not allowed among expenses since the object is to get income before taxes are paid. This gives a combined entrepreneur and family and property income of \$237,712,000.

The value of the farmers' own labor was estimated at \$700 per farm the cost of hired men without board.³

The unpaid family labor performed by members of the family other than the operator was figured at \$348 per farm, the average of 398 farms in the State on which data were available.

The average mortgage debt and the 5.3% interest rate in the State as reported in the 1920 Census was used. It is \$1,976 per farm on the 44,410 farms reporting. This was multiplied by 52,230 the estimated number of farms owing mortgages.

To the value of farm products was added \$28,864,000 for the value of house rent on farm dwellings, an average of \$144 per farm. These figures are the results of our own study.

¹From Chapter VIII and Page 205 of *Income in the Various States.*

²(*Farm Economics*, Vol. 1, p. 139).

³U. S. D. A.

The final figures are as follows:

\$529,717,000	Gross value of products.
28,864,000	House Rent.

\$558,581,000	Gross Income
287,247,000	Expenses previously calculated.
140,310,000	Value of operator's labor.
69,750,000	Value of family labor.
5,380,000	Interest on mortgage debt.

\$502,687,000	Gross Costs.
\$558,581,000	Gross Income.
502,687,000	Gross Costs.

\$55,894,000 Net Income.

Method 2:—The second method used was to assume that the average net income on farms studied last summer in connection with part two of this study was the same as for all farms in the State and deducting \$5,380,000 interest on mortgage debt. There were 200,443 farms in Pa., and the annual net income of the farms we studied averaged \$308 per farm: $200443 \times \$308 = \$61,736,444$ Total Income; 5,380,000 Interest on mortgage debt; \$56 356 444 Net Income.

Some unpublished figures of the Division of Farm Management and Costs, United States Bureau of Agricultural Economics, give an annual income of \$358 per farm on farms from which they received a return on questionnaires. These farms, however, were considered by those in charge of the work as above the average of the State.

Method 3:—The gross value of all farm products in the State were found by J. M. Fry and N. C. Dale from Census and other data available to be \$318,705,037.

The ratio of expenses to the gross value of products on 343 farms on which we took data last year were found to be as follows: \$1,270,-272: \$1,408,023:: 0.902: \$1.00 In other words for each dollar of gross value the cost was 90.2 cents. Taking 90.2% of the gross value of farm products we get: $318,705,037 \times .902 = \$287,471,943$.

\$318,705,037	Gross value of all farm products.
287,471,943	Expenses in creating that value

31,233,094	Value of products above expenses
28,864,000	Plus House rent.

60,097,094	Total net income
5,380,000	Less interest on mortgage debt

\$54,717,094 Net Income.

The average of the three methods is:

55,894,000
56,356,000
54,717,000

3) 166,967,000

\$55,656,000

The best figure to use is probably \$56,000,000.

The Wealth Invested in Pennsylvania Farms.

Census figures were available for nearly all the items involved in this calculation. From the 1920 census we get the following figures:

Value of Land and buildings	\$1,326,752,028
Value of Implements & machinery	163,826,365
Value of Livestock	238,774,641

Total \$1,729,353,034

Index numbers for land and buildings for January 1920 and January 1, 1925 respectively are 174 and 141.

$\$1,326,752,028 \times 141 \div 174 = \$1,075,126,600$, the wealth in Pennsylvania Farms on January 1, 1925.

The 1925 Census figure is \$1,176,657,548.

Index numbers for implements April 1, 1920 and April 1924 respectively are 175 and 186.

$\$163,826,365 \times 186 \div 175 = \$174,124,000$, the value of Implements and Machinery on Pennsylvania Farms in 1925.

The 1924 Year Book, U. S. D. A. values all livestock except poultry at \$151,000,000.

\$18,337,248 State Department of Agriculture estimate of value of chickens.

169,042,248 Total value all livestock.

1,176,657,548 Census figure for value of lands and buildings 1925

174,124,000 Value of implements and machinery 1925.

169,042,248 Value of all livestock in Pennsylvania 1925.

\$1,519,823,896 Value of wealth invested in farming in Pennsylvania in 1925.

Fry and Dale on exhaustive calculations of State and Federal figures available arrived at \$1,510,318,573.

From these results I suggest using \$1,515,000,000 for the total capital in real estate, implements, and livestock. From this we subtract \$103,000,000 for mortgage debt giving a figure of \$1,412,000,000. The investment in feed, seed, and supplies on hand varies so much

throughout the year that it is difficult to arrive at any satisfactory figure. It no doubt is upward of \$100,000,000. I would, therefore, suggest using for wealth the round figure of \$1,500,000,000.

Summary Table of Wealth, Income and Taxes

Wealth	\$1,500,000,000
Income before taxes are paid	56,000,000
Taxes paid on farm property	21,489,600
Gross value of all farm products	318,705,000
Percent income is of wealth	3.73%
Percent taxes are of wealth	1.43%
Percent taxes are of income before taxes are paid	38.37%
Percent income after taxes are paid is of wealth	2.30%

State Taxes Paid.

Since so little of the agriculture industry of the Commonwealth is incorporated the amount of State of State taxes paid directly by agriculture is negligible. Part I of this report is devoted to the local taxes paid by agriculture.

WEALTH AND INCOME OF MINING AND QUARRYING IN PENNSYLVANIA AND STATE TAXES¹

This group includes bituminous and anthracite coal mining, oil wells, and lesser mining, such as slate, limestone and clay.

Estimate of Wealth or Invested Capital

The final figure for mining wealth, \$1,500,000,000 is a projection of the United States Census figures for capital invested in mining and quarrying in Pennsylvania in 1909 and 1919. These latter figures have been projected along a straight line to the year 1923. The Census figures are:

Mining and Quarrying Capital Invested

1909	\$ 866,207,208 ¹
1919	1,317,519,289 ¹

It was impossible to get a longer period over which to take the trend, for want of data. In order to get another comparable figure, it would have been necessary to go back to 1889. No figures for capital invested in mining were collected in 1899.

It is believed that this estimate is probably nearer a minimum figure than a maximum. During the latter part of the period from 1909 to 1919, there was undoubtedly a larger-than-normal increase in

¹Page 197, Vol. XI, Census of 1920.

the amount of capital invested. However, the fact that the rate of increase between 1909 and 1919 was continued after the latter date, is supported by the figures collected by the statistical organizations of the Pennsylvania State Government. These figures are as follows:

MINING AND QUARRYING CAPITAL INVESTED

1915	\$ 451,659,500 ¹
1916	368,653,800 ²
1917	461,380,400 ³
1918	543,086,400 ⁴
1919	697,918,800 ⁵
1920	780,542,800 ⁶
1921	825,626,200 ⁷
1922	857,955,200 ⁸
1923	904,490,900 ⁹

These figures are consistently lower than the figures given by the Census. Such a large difference is somewhat hard to explain logically. So far as we have been able ascertain, the classifications are comparable. The definitions of capital as collected by the two organizations are different, and this will explain, at least in part, such a discrepancy. The Census, in defining capital, asks for a statement of "the total amount of capital, owned and borrowed, invested in the enterprise, not including securities and loans representing investments in other enterprises." The Department of Internal Affairs merely asks for a statement of "capital invested."

In one case, it was possible to check the Department of Internal Affairs figures against figures from other sources, and it was definitely shown that they are low. Dr. Wilbur C. Plummer, in investigating the amount of capital invested in the natural gas companies in Pennsylvania, compiled the wealth figures, as reported to the Public Service Commission by the different companies. With the figures for definite companies in hand, he went to the Department of Internal Affairs, and compared them with the figures as shown in the reports to that Department. His statement concerning the subject is, "The fixed capital figures of the Public Service Commission Reports were on the whole much higher than the capital invested figures of the Department of Internal Affairs. This difference might be generalized at a figure of 20 percent." Since the public utilities, in their reports to the Public Service Commission, are in many cases seeking increases

¹Report of the Commissioner of Labor and Industry, part I, 1915, p. 315.

²p. 67, Report on Productive Industries, 1916, 1917, 1918, 1919, Dept. of Internal Affairs.

³p. 129, Idem.

⁴p. 147, Idem.

⁵p. 187, Idem.

⁶p. 61, Idem, 1920.

⁷p. 1, Idem, 1921.

⁸From unpublished material of the Dept. of Internal Affairs.

⁹Idem.

in rates, this might be assigned as a reason for the greatly increased figures. With the Census figures running considerably more than 20 percent higher than the figures of the Department of Internal Affairs, however, it is plausible to assume that the latter are considerably lower than the actual capital figures, from an economic standpoint.

The figures of the Department of Internal Affairs, assuming that they are collected on a comparable basis during the whole period, are valuable in discovering the trend, however. From 1919 to 1923 they show that the amount of capital invested in mining and quarrying increased at a fairly steady rate. This tends to strengthen the projection of the Census figures, which shows a lower yearly increase than the figures of the Department of Internal Affairs. The average yearly increase in the latter figures is \$51,643,025 for the period from 1919 to 1923. The average yearly increase in the Census figures, upon which our final accepted estimate is based, is only \$45,131,208.

Another method of indicating that this figure is not too high is by the addition of component parts of the group for comparable years. In the mining and quarrying group in Pennsylvania, the predominant industries are bituminous and anthracite coal mining and oil production. In 1919, these three industries accounted for 96.8 percent of the total "value of products" ⁽¹⁾ of the mining and quarrying in Pennsylvania.

The United States Coal Commission reported that the book value of the anthracite coal companies in Pennsylvania in 1922 was \$600,000,000. The assessed value of these same companies for 1922 was \$618,739,594, and assessed valuations are, of course, notoriously low.

The Pennsylvania bituminous mines, according to computed figures, were valued at \$622,586,584 in 1923. This result was arrived at by the use of Federal Trade Commission figures. It was estimated by the Commission that the average investment per ton of annual production in the bituminous mines in Pennsylvania was \$3.68,² this figure being based on about one-third of the bituminous production in Pennsylvania, and averaged for the years 1916-17, and 1918-20. The average production for the years 1916-20 was 168,532,000 tons.³ In 1923 the production of bituminous was 169,044,178 tons,⁴ a figure almost exactly the same as the average given above. Multiplying the 1923 production by \$3.68, the "capital invested" figure, \$622,081,775, is arrived at.

The third large mining and quarrying industry in Pennsylvania is oil production, and the Census of Mining for 1920, page 307, gives

¹p. 197, Vol. XI, Census of 1920.

²p. 68, Annual Report of Federal Trade Commission, 1923.

³p. 272, Statistical Abstract of the U. S., 1923.

⁴Frank Hall, "Mines and Mining in Pa." Commonwealth of Pa., 1925, p. 12.

the capital invested in oil wells in Pennsylvania in 1919 as \$201,286,270. It is believed that a figure for 1923 would show little change.

Adding our three figures together, we get a figure very comparable to the projected Census figure:

Anthracite coal mining	\$618,739,594
Bituminous coal mining	622,081,775
Oil Production	201,186,270
	<hr/>
	\$1,442,007,639

Of the three figures, the first is undoubtedly low, the second is probably fairly accurate, and the third is fairly reliable, it is believed. It will be noted that the total of the three is slightly less than the projected Census figure, but the difference is accounted for by the small quarrying industries, such as limestone, building stone, and slate.

Estimate of Net Income, Including Taxes

The only available source for securing a net income for the Mining Industries in Pennsylvania is the Statistics of Income published by the Bureau of Internal Revenue. These statistics report the income from mining corporations divided among the States, but the income from mining reported through personal returns is reported only for the United States as a whole. Our problem is therefore to divide this personal income from mining, allocating a certain proportion of it to Pennsylvania.

In the whole United States, individuals, as opposed to corporations, produced \$71,982,739 worth of mining products in 1919.¹ In the state of Pennsylvania, individuals, as opposed to corporations produced \$28,461,348 worth of mining products,² or 39.54 per cent of the total value of mining products from individually-owned mines and quarries in 1919 in the United States. It is now assumed that the personal income taxes paid by the mining industry were paid in proportion to the value of the mining product which that State produced. The net income from mining in the United States in 1922, from the personal returns, was \$15,932,045.³ Taking 39.54 percent of the total personal net income, that is, 39.54 percent of \$15,932,045, we find that Pennsylvania paid income tax on a personal mining income of \$6,299,530.

We have found no method whereby this figure could be checked, except for certain figures given in the Managers' Handbook⁴ (L.P. Alford, Editor; Ronald Press) for 1925. On page 241 are found certain figures which indicate that:

¹p. 29, Census of Mining, 1920, Bur. of the Census.

²p. 197, Census of Mining, 1920, Bur. of the Census.

³p. 10, Statistics of Income, 1922, Bur. of Internal Revenue.

1. In the anthracite coal industry, 16.5 percent of the gross sales or value of product is net profits;
2. That in the bituminous coal industry net profits are 18.6 percent of gross sales or value of product;
3. That in the petroleum oil industry, 19 percent of the gross sales or value of product represent the net profits.

Our figure for net profits is 22.1 percent of value of product, which is somewhat higher than that which is supposed to represent the ratio of net profits to gross sales in any of Pennsylvania's three great mining industries. However, we accept the figure for net mining income from personal returns as computed.

The corporate income from the mining industry in Pennsylvania in 1922 was \$54,668,275.¹

There is one more item which must be added to the net income figure before it may be considered complete, and that is taxes, federal, state, and local, except federal income and profits taxes. These taxes are allowed as deductions before arriving at net taxable income, as reported in Statistics of Income, but economically they represent net income in our meaning of the phrase. The taxes which must be added are as follows:

Federal	\$ 826,416
State	5,268,358
Local	<u>21,741,790</u>
Total	\$27,836,564

By adding the three items together, we get the aggregate figure which we accept as the net income for the mining industry in Pennsylvania in 1922.

Personal mining income	\$ 6,299,530
Corporate mining income	54,668,275
Taxes	<u>27,836,564</u>
Total	\$88,804,369

It is difficult to estimate the accuracy of this total figure. First, it must be kept in mind it is "net income" as defined legally in the income tax law of 1921, plus taxes. Considering it in relation to the total wealth of the Pennsylvania mining industries, we find that it is only 6.29 percent of the wealth figure. This would seem rather small for the mining industry, which is reputed to be getting better profits, but in the year 1922, the anthracite coal strike shut

¹p. 127 Statistics of Income, 1922, Bur. of Internal Revenue.

down those mines for several months, and an exceptionally low income figure for the whole industry might be expected as a result.

Estimate of Pennsylvania State Taxes

This figure, as are the others for State taxes, is taken directly from the Report of the Pennsylvania Tax Commission, page 123. On this page is given a division of the Pennsylvania State Taxes as compiled in the office of the Auditor General, and in the case of mining industries, probably follows closely the classification which we have adopted, i.e., in the Mining group are included bituminous and anthracite coal mining, oil wells, and miscellaneous mining and quarrying. The total for 1923, is \$5,268,358, and is probably as accurate as it is possible to obtain.

INVESTED CAPITAL AND INCOME IN MANUFACTURING AND STATE TAXES PAID

The final figure accepted as representing the wealth of the manufacturing industry in Pennsylvania in 1922 is our own estimate, based on what we believe to be the most reliable figures available. The Bureau of the Census has not collected data for "capital invested" in manufacturing since 1919, so that it has been necessary for us to attempt to project that figure into 1922. Two sources are available in making this projection estimate. First: W. I. King in making his study of "Estimated National Wealth" for the Bureau of the Census estimated that the wealth (land, buildings, machinery) of manufacturing enterprises increased 18.05% from 1919 to 1922.¹ As a check against this estimate we have data collected by the Pennsylvania Department of Internal Affairs showing that "capital invested" in manufacturing (figures for shipbuilding subtracted, since we include that industry under Construction) increased from \$3,493,323,900 in 1919 to \$4,076,614,900 in 1922, or 16.69%.² Applying King's rate of 18.05% to the Census figures for "capital invested" in manufacturing in Pennsylvania in 1919 (\$5,792,496,622, less shipbuilding), we arrive at a figure of \$6,838,042,262 for 1922, whereas the rate of 16.69% gives us \$6,759,264,308.

It is possible to get another check upon our final figure by the following method. In 1914 the Census figure for capital invested in Pennsylvania in manufacturing (less shipbuilding)—\$3,131,125,921—was 36.6% higher than the same figure as given by the Department of Internal Affairs. In 1919 the Census figure of \$5,792,496,622 was 65.81% higher. It does not seem a wild assumption that the Census figure in 1922, if collected, would have been 50% greater.

¹Wealth, Debt and Taxation: Estimated National Wealth, p. 9.

²We have not used the totals given by the Department of Internal Affairs because we believe that the Census figures are more complete.

If so, capital invested in manufacturing in 1922 amounted to \$6,114,922,350, as compared with \$6,838,042,262, and \$6,759,264,308 resulting from the previous method.

Still another method is available through use of data given in "Estimated National Wealth." There the estimated value of "Manufacturing machinery, tools and implements" in Pennsylvania in 1922 is given as \$2,193,873,000.¹ W. I. King has estimated² that 30% of manufacturing wealth consists of tools and machinery. On this basis, the total manufacturing wealth is \$7,312,910,000.

With the results of these various methods before us, we believe that \$6,750,000,000 can be safely taken as a conservative figure for the wealth of the manufacturing industry in Pennsylvania in 1922.

Estimate of Net Income, Including Taxes

In securing a net income figure for Pennsylvania manufacturing, it is again necessary to refer to the Statistics of Income, 1922, Bureau of Internal Revenue, as the only source available. The same problem which we encountered in mining, namely, an allocation to Pennsylvania of a certain proportion of the personal income from manufacturing, reported thru personal income-tax returns, is met here also.

In 1919, Pennsylvania had a total "value of manufactured products" of \$431,125,113³ out of a total "value of manufactured products" of \$3,536,321,836³ for the whole United States. These two figures refer only to the products of plants owned by individuals as opposed to corporations. Again we assume that the net income of establishments owned by individuals in Pennsylvania is proportional to the value of their products, as compared to the value of similar production in the United States. Pennsylvania, as seen from the above figures, had 12.1 percent of the production in this field. The total personal income from manufacturing in the United States in 1922 was \$220,384,722.⁴ 12.1 per cent of \$220,384,722, is \$26,666,551 which represents the income of individually-owned manufacturing establishments in Pennsylvania in 1922. We may assume that this figure is not far wrong, since, aside from having 12.1 percent of the value of production of individually-owned manufacturing plants in the United States, Pennsylvania had also 12.4 percent⁵ of the total wage earners in similar factories, and 11.6 percent⁵ of the "value added by manufacturing" in such establishments, as well as 10.3

¹p. 22. Wealth, Debt and Taxation.

²p. 30. Ident.

³p. 1031. Abstracts of 14th Census, 1920 Bureau of the Census.

⁴p. 10. Statistics of Income, 1922. Bureau of Internal Revenue.

⁵pp. 1030 and 1031. Abstract of 14th Census of the U. S. 1920.

percent¹ of the total number of such establishments in the United States, all in 1919.

The corporate manufacturing net income for 1922 was \$377,016,235.²

The third item to be added to this figure is that of taxes, federal, state and local, except federal income and profits taxes. These taxes, as later estimated are as follows:

Federal	\$34,858,333
State	4,392,292
Local	82,835,752
	<hr/>
	\$122,086,377

Our final figure is therefore the following:

Personal net income	\$26,666,551
Corporate net income	377,016,235
Taxes	122,086,377
	<hr/>
	\$525,769,163

How much confidence can be placed in this figure? It must be kept clearly in mind that the "net income" which we accept is merely a legal "net income" plus taxes as later estimated. On this account, it is probably somewhat low, and in comparison with the wealth figure which we have accepted, it represents 7.78 percent of the wealth, or invested capital. Since the manufacturing group includes such a varied list of industries, it would be practically impossible to secure an average percentage of net income for the whole group, by working from individual divisions.

Estimate of State Taxes

The State taxes paid by the manufacturing industry in Pennsylvania in 1922 is taken from the Report of the Pennsylvania State Tax Commission 1925, page 122. In the report of the Auditor General for 1920, we have the last published list of Pennsylvania corporations with the amount of State tax paid by each. It is assumed that the Auditor General has followed the same classification since that time, and if this be true, the list of corporations included as manufacturing corporations contains a number which, according to our classification, should be included in either trade or construction. A careful survey of the names of the first 25 per cent of the corporations listed in 1920, discloses 44 which should probably be included in construction, since the names include such words as "paving," "engineering," "construction," "excavation," and the like. The taxes paid by these 44 concerns, indicate that organizations of a similar

¹Ibid.

²p. 128, Statistics of Income, 1922, Bur. of Int. Rev.

type paid about 1.75 per cent of the total State taxes which have been assigned to manufacturing. A number of concerns were noticed which should go under trade in our classification, but no attempt was made to list them. Therefore, our State tax figure for 1923 is probably four or five per cent higher than it should be.

Probably some of the concerns have been included in manufacturing through pure error. It is also possible that, since in Pennsylvania all manufacturing concerns are exempt from the capital stock tax, some concerns have succeeded in having themselves classified as manufacturing concerns in order to lessen their tax bills.

Since "manufacturing" concerns are exempt from the State capital stock tax, there have been many legal cases concerning what is and is not manufacturing. A supposedly complete list of contested processes is given on pages 149-156 in "Pennsylvania Corporation Taxes" by Ruslander and Main.¹ In this list are a number of processes which the Census Bureau would classify under construction or trade. In fact, a large share of what we would call construction is included in manufacturing in Pennsylvania.

In short, the State taxes of \$2,866,364 listed as paid by the manufacturing industry in Pennsylvania is substantially in excess of the amount actually paid.

We have listed separately the taxes paid by manufacturing corporations under the capital stock tax for other businesses. Since manufacturing concerns are exempt from that tax insofar as their capital is invested in manufacturing, that part of the tax bill is really not a burden on the manufacturing industries, but on other industries. No way was found to distribute these taxes upon other businesses, and hence they are listed separately.

INVESTED CAPITAL AND INCOME IN THE CONSTRUCTION INDUSTRY AND STATE TAXES PAID

The wealth in the construction industry in Pennsylvania is about \$125,000,000. This is a capitalized net income figure, and is used only in the absence of any better material. Our estimate for the net income of the construction industry in Pennsylvania is \$19,879,315 for 1922.² In the year 1921, the net income of 2000 construction corporations (all classes) throughout the United States, was 16.14 percent of the capital invested.² We have, therefore, capitalized this figure at 16.14 percent, arriving at the capital or wealth figure.

The only available source of information is the figure of the Department of Internal Affairs and, for 1922, the capital invested in

¹Accountants Supply Co., 1923.

²p. 15, Statistics of Income, 1921, Bur. of Internal Revenue.

construction was \$99,037,000, which is not so far from our computed figure. We have seen in the cases of mining and manufacturing that the figures of the Department of Internal Affairs are low.

Estimate of Net Income

In securing this figure we have departed from our method of adding to the net corporation income, as reported in the Statistics of Income the computed net income for the individually-owned businesses of this group.

It is well to mention first that the group includes three general divisions:

1. All kinds of building construction;
2. All kinds of engineering construction, such as docks, bridges, sewage and water systems, paving, etc.;
3. Shipbuilding.

The last group is usually included in the manufacturing group, but since the Statistics of Income has included it in Construction, it has been necessary to follow that classification.

Figures as to volume of construction are neither numerous nor reliable. The reports of the Philadelphia Federal Reserve Bank on business activity within the district, show the volumes of building in certain cities in only the eastern part of the State. The Engineering News-Record gives building statistics for the whole United States and for geographical divisions, but not for the States. Working from their figures, it was estimated that out of a total of \$1,556,550,000 worth of building in the United States, in 1922 Pennsylvania had \$202,058,445 worth. To get the share in Pennsylvania, the amount assigned to the middle Atlantic division was divided in proportion to the population of Pennsylvania as compared to the population in Pennsylvania, New York, and New Jersey.¹

The reports on building of the F. W. Dodge Corporation are collected for 27 northeastern States, and their accuracy is described as follows in the reports: ".....gathered by our organization, which covers its field very thoroughly cover the small towns and the rural districts as well as large cities cover some classes of projects not usually included in the statistics of building permits compiled by the building departments of the various cities."

As to the special figures for Pennsylvania, an enclosure in a letter from the F. W. Dodge Company, dated August 7, 1925, gives the volume of building in 1922 in the State as \$361,257,900. This

¹These figures are limited, however, as follows: Waterworks, \$15,000 and above; other public works, \$25,000 and above; industrial construction, \$40,000 and above; commercial buildings, \$150,000 and above.

figure is an addition of the figures for the eastern and western parts of the States, which, in the Dodge reports, are included in different districts. To this figure, the value of product of the shipbuilding industry in Pennsylvania, \$48,117,142¹ in 1921, has been added, giving a total of \$409,375,042 for the volume of building in Pennsylvania in 1922. The 1921 shipbuilding figures were the latest available, and 1922 was probably not much different.

The F. W. Dodge Company's Building Statistics, Vol. 3, No. 12, contains the following statement, "The year's total indicates that the volume (of building) for the entire country was approximately 4½ billions of dollars." This estimate, based evidently on their figures as a whole, is supposedly comparable in classification to the figure which we have accepted for Pennsylvania. We add to it the 1921 figure for "value of product" of the Pennsylvania shipbuilding industry \$400,834,105,² giving us a grand total of \$4,900,834,105.

The Pennsylvania figure is 8.353 per cent of the figure for the country as a whole. We have faith in this percentage. The National Bureau of Economic Research in its "Income in the Various States, its Sources of Distribution, 1919, 1920 and 1921" estimates that in 1919, Pennsylvania had 8.358 percent of the total volume of building in the United States, 6.718 percent in 1920, and 7.105 percent in 1921, an average of 7.394 percent for the three years. Since 1920 and 1921 were depression years, and since our figure is almost identical for that of 1919, our figure is strongly supported. The National Bureau of Economic Research does not include shipbuilding in its classification.

Following our assumption that net income is in direct ratio to proportion of volume of building, we now take 8.353 percent of the total construction income, both corporate and personal, for the United States.

Corporate Income	\$91,724,158 ³	
Personal Income	146,265,967 ⁴	\$237,990,125

Taking 8.353 Percent of \$237,990,125 gives us the total net construction income in Pennsylvania in 1922 as \$19,879,315. The corporate net construction income in 1922 was \$5,236,121⁵. Subtracting this from the total income, we get the personal net construction income as \$12,643,154, more than twice as much as the corporate net income for the State. It is easily seen above that for the country as a whole, the personal income is about 60 percent, larger than the corporate income.

¹p. 1189, Census of Manufacturers, 1921, Bur. of the Census.

²p. 1189, Census of Manufacturers, 1921, Bureau of Census.

³p. 16, Statistics of Income, 1922, Bureau of Internal Revenue.

⁴p. 10, Idem.

⁵p. 128, Statistics of Income, 1922, Bureau of Internal Revenue.

To make this income figure comparable to the others in which income is given before taxes are paid, we must add:

Federal taxes	\$88,515	
State taxes	37,240	
Local taxes	1,683,935,	\$1,809,690

Adding these taxes to the total estimated above, we get a final total of \$21,563,250 as the net income for the construction industry in Pennsylvania in 1922.

Estimate of State Taxes

To distribute the taxes paid by miscellaneous corporations, an actual count was made on the first 25% of all the corporations listed in this miscellaneous tax group in the 1920 report of the Auditor General, the latest report in which the lists are published in full. This gave an estimate of \$90,000 as the amount of State taxes paid in 1923 by construction companies, as adjusted to the business done in 1923. The construction business is not incorporated to the extent that other industries are, and hence under existing State laws, does not pay the taxes other industries pay where incorporation is a more general rule.

WEALTH AND INCOME IN TRANSPORTATION, PUBLIC UTILITIES, TRADE AND GENERAL SERVICE IN PENNSYLVANIA AND STATE TAXES PAID

Public Utilities

The main sources of information on Public Utilities which includes steam railroads, electric railways, light, heat and power, telegraph and telephone, natural gas and water companies are (1) the Reports to the Pennsylvania Public Service Commission which we believe to be a great deal above the average as a source of information for work of this kind, and (2) the United States Census, the accuracy of which is seldom impugned. In a number of cases we were able to check comparable figures from both sources against each other and in every case where this could be done, the results were favorable.

Steam Railroads

Wealth, \$1,902,737,000. This figure is for 1922 and comes from Estimated National Wealth, a publication of the Bureau of the Census, made under the supervision of Mr. W. I. King. The figures of the Pennsylvania Department of Internal Affairs for "Capital Invested" check favorably with this figure. The Pennsylvania Department of Internal Affairs figures are: 1922, \$1,853,056,034; 1923, \$200,102,325,000.

Income, \$135,925,578. Reports of 197 large railroads to the Public Service Commission of Pennsylvania for 1923 show that the

total net income (before payment of taxes) of such roads was \$323,632,350. Approximately 42% of the mileage of such roads was in Pennsylvania, and 42% of the total net income of these roads was apportioned to Pennsylvania. This is the method employed by Mr. W. I. King in apportioning wealth of railroads to a particular state.

Table 32. Wealth and Income of Public Utilities and Taxes Paid

	Wealth 1922	Net Income Before Pay- ing Taxes 1923	% Net Income Before Paying Taxes to Wealth	Taxes Paid		% of Total State Taxes to Wealth
				Federal 1923	State 1923	
Steam Railroads -----	1,902,737,000 (1922)	135,925,578 (1922)	7.1	10,798,930 (1923)	9,415,793 (1923)	.49
Electric Railways -----	442,396,000 (1922)	21,129,332 (1922)	4.7	2,459,692 (1923)	2,404,446 (1923)	.54
Electric Light, H. and P. -----	390,155,013 (1922)	25,544,933 (1922)	6.0	2,378,790 (1922)	2,169,256 (1923)	.55
Telegraph & Telephone ---	151,025,000 (1923)	12,645,634 (1923)	8.3	2,617,946 (1923)	443,049 (1923)	.29
Natural Gas ¹ -----	120,253,764 (1923)	14,841,405 (1923)	12.3	812,775 (1923)	342,588 (1923)	.20
Water -----	118,467,831	6,436,075	5.4	510,741	418,353	.35
Total -----	3,125,034,608	216,532,957	-----	19,578,874	15,193,485	-----

State Taxes: \$9,415,793.00. The total state corporation taxes paid by the steam railroads in 1923 was \$9,415,793. This is taken from the Report of the Pennsylvania Tax Commission, page 122.

Electric Railways

Wealth, \$442,396,000. This is the figure for 1922 given in Estimated National Wealth, a publication of the Bureau of the Census made under the supervision of Mr. W. I. King. The reports of the Public Service Commission of Pennsylvania could not be used for Wealth and Income because of the large number of lessor companies which do not report to the Public Service Commission. They could be used for taxes, however, because of the almost invariable practice of the lessee transportation companies paying the taxes on the lessor companies; also because we were able to check these tax figures from another source (Bureau of the Census) with favorable results.

Income \$21,129,332. Net income before paying taxes was \$21,129,332 for 1922. The source is the Bureau of the Census.

Net income, operating companies, (p. 167 Electric Railways, Bureau of Census)	\$6,598,503
Net income non-operating or lessor companies, (p. 172, Elec. Railways, Bureau of Census)	9,554,164
Taxes, (p. 167 Idem)	4,976,665
Total	\$21,129,332

¹Natural Gas Companies have comparatively low taxes. This is due to the fact that they are not subject to the gross receipts tax.

The reports to the Public Service Commission give \$438,152 as the Real and Personal Taxes. This amount is assigned to Local Taxes.

The Report of the Tax Commission gives the total corporation taxes paid to Pennsylvania in 1923 by Traction and other Transportation as \$2,205,858. Mr. Lick, Secretary of the Tax Commission, says this item means Electric Railways with the exception of an insignificant element of incorporated motor busses.

Light, Heat and Power (privately owned)

Wealth, \$390,155,013. The wealth figure is \$390,155,013 and comes from the Bureau of Census, Central Electric Light and Power Stations, 1922, p. 126. The figures of the Pennsylvania Department of Internal Affairs for "Capital Invested" are:

1922, \$332,006,041; 1923, \$394,857,772.

Income, \$25,544,933. The income figure is \$25,544,933 and comes from the Bureau of Census, "Central Electric Light and Power Stations."

\$106,019,854 Aggregate Rev. for Pennsylvania, (p. 136.)

84,744,927 Aggregate Expenses for Pennsylvania, (p.152.)

21,274,927 Net Income Pennsylvania after taxes

4,270,006 Taxes, (p.154.)

\$25,544,933 Net Income light, heat and power, Pennsylvania, 1922, before taxes.

The Reports to the Public Service Commission were not very satisfactory for securing a net income figure: There is an unusual amount of inter-corporate holding of securities among electric light and power companies and in some cases between electric light and other utilities. To count the net income of a corporation and then count it again as income of the company holding its stock is obviously double counting of income. We have no reason to question the census figures.

State Taxes, \$2,169,256. The total of all taxes, in 1923 was \$4,732,523 according to the Reports to the Public Service Commission.

The total for 1922 from a different source, (Bureau of Census, Central Electric Light and Power Stations, p. 154) is \$4,270,006.

The total of \$4,732,523 was assigned to Federal, State and Local as follows:

The reports to the Public Service Commission require answers to the following: State Loan Tax, State Capital Stock, Gross Receipts, Federal Income Tax, Federal Capital Stock and "Other Taxes." The total of these definitely specified items are:

State	\$2,019,097
Federal	2,283,926
Other Taxes	429,500
	<hr/>
	\$4,732,523

We were able to tell something of the contents of "other taxes" from the fact that 38 out of a total of 104 of the companies which reported "other taxes" itemized the other taxes. The totals of these itemized "other taxes" were Federal, \$16,919; State, \$26,157; and Local, \$32,130, leaving a balance of \$354,294 of "other taxes." We distributed this balance among the Federal, State and Local taxes in the ratio of 22% for Federal, 35% for State, and 43% for Local. The result is \$77,945 in Federal, \$124,003 in State, and \$152,346 in Local taxes. After having apportioned the "other taxes" the total Federal taxes are \$2,378,790; the total State taxes are \$2,169,256; and the total Local taxes are \$184,477. The total taxes, Federal, State and Local for Light, Heat and Power, Pennsylvania, are \$4,732,523.

We can check against these figures from two other independent sources with very favorable results. The Bureau of Census publication, Central Electric Light and Power Stations, give the total taxes for 1922 as \$4,270,006 as against our figure above of \$4,732,523 which is for a year later, 1923. The Pennsylvania Tax Commission Report gives the Pennsylvania corporation taxes paid by Light, Heat, and Power Companies as \$2,080,909. Our figure above from the Reports of the Public Service Commission for total State taxes, corporation and all others, is \$2,169,257.

Natural Gas Companies

Wealth, (1923)—\$120,253,764.

The natural gas companies reporting to the Public Service Commission give facts for the companies as a whole, not merely for the capital invested in Pennsylvania, and as a number of the largest companies do a great amount of interstate business, it is necessary to make allowance in the total wealth, income, and tax figures for the capital invested in other states.

From the reports of the Natural Gas Companies to the Pennsylvania Department of Internal Affairs, we were able to find which of the companies did an interstate business and also how much of

their capital was actually invested in Pennsylvania. Our wealth figures for the companies doing an interstate business are therefore taken from the reports to the Department of Internal Affairs and for all the other companies from the Reports to the Public Service Commission.

The reason we did not use all Department of Internal Affairs figures is because some of the largest companies evaded the question as to the capital invested in the State in their reports.

The reason we did not use Public Service Commission figures for the companies doing an interstate business is that they did not give what we wanted; that is, wealth actually invested in Pennsylvania.

On the whole the natural gas companies gave higher valuation figures to the Public Service Commission than they did to the Department of Internal Affairs and there is, therefore, some objection to adding and subtracting figures from the two sources and apportioning taxes on the basis of the figures.

The totals thus secured were:

\$171,276,831 Total wealth of companies operating in Pa.

51,023,067 Wealth of these companies lying outside of Pa.,
30% of total.

\$120,253,764 Wealth of these companies lying within Pa., 70%
of total.

The "capital invested" figure of the Department of Internal Affairs is \$103,226,977. This is, no doubt, too low. A number of the largest companies gave the par value of their capital stock for a "capital invested" figure. For example, one company gave as its "capital invested" figure \$140,000 which was the par value of its capital stock. In its report to the Public Service Commission this Company gave more than a million dollars as the value of its fixed capital.

Net Income Before Paying Taxes, (1923:) \$14,851,405.

The net income before paying taxes of all the natural gas companies operating in Pennsylvania and reporting to the Public Service Commission was \$21,216,294 for 1923. As 70% of the total wealth of these companies was located in Pennsylvania, we have given 70% of the total income to Pennsylvania. The result is \$14,851,405.

In comparison with the other public utilities this is a high income figure; the per cent of net income before paying taxes to wealth is

12.3% and the percent of net income after paying taxes to wealth is 11.3%.

The only check we could find for these comparatively high rates of income were dividends paid by the natural gas companies. Of course dividends are paid on par value which only theoretically represents capital invested. Yet rates of dividends paid over a period of years are some indication of income. We give dividends of four natural gas companies below from Poor and Moody. They are the only companies which stated their dividends. These companies comprise a large sample, however, as they are four of the largest companies, as will be seen from the amounts of their capital stock:

Fayette County Gas Company: Capital stock, \$1,600,000. Dividend 8% over a period of years, extra dividend of 2% in 1922.

Pennsylvania Gas Company: Capital stock, \$7,200,000, Dividends at rate of 10% per annum were paid for a number of years; 20% paid in 1921; 10% each in 1922 and 1923. A stock dividend of 50% was paid in 1916.

Manufacturers Light and Heat Company: Capital stock, \$23,000,000. Dividends from 1917 to 1923, inclusive, 8%, also extra dividends of 2% in 1920 and 1923.

Pennsylvania Fuel Supply Company: Capital stock \$978,000. Dividends paid at rate of 6% for a period of years.

Notwithstanding the seeming high rate of income for a public utility, the natural gas companies are exempt from the gross receipts¹ to which the other public utilities are subject. According to our results, natural gas companies are undertaxed when compared with the other public utilities.

State Taxes, (1923) \$342,588

The Taxes in the Reports of the Public Service Commission of those companies doing an interstate business were so itemized that we could tell with a fair degree of accuracy the taxes, state and local, paid to other states. In the case of the federal taxes of those companies doing an interstate business we allocated a share to Pennsylvania according to the percent of the total wealth located in Pennsylvania of each individual company.

Total Federal	\$812,775
Total State	342,588
Total Local	65,386

Total Taxes, Nat Gas Cos. Pa. 1923 \$1,220,749

¹Report of Tax Commission, p. 13.

Of the above figures, the following amounts were definitely specified on the reports:

<i>Federal</i>	<i>State</i>
Federal Capital Stock.. \$81,015	State Loan \$2,046
Federal Income 731,760	State Capital Stock 287,143
<hr/>	<hr/>
\$812,775	\$289,189

There was \$118,785 of "other taxes" to be allocated. We have an idea of what was contained in these "other taxes" from the fact that twenty-one of the companies out of a total of sixty which reported "other taxes" itemized the other taxes. The totals of these itemized taxes were: State \$7,196, or 45% of the total; and local \$8,914, or 55% of the total; Federal taxes—none.

Apportioning the balance of "other taxes" of \$102,675 between State and local in the proportions of 45% to the State and 55% to the local, we have \$46,203, additional for the State, and \$56,472 for local.

Federal Capital Stock	\$81,015
Federal Income	731,760
Other Federal Taxes itemized	None
Other Federal Taxes allocated	None
<hr/>	
Total Federal Taxes	812,775
State loan	\$2,046
State Capital stock	287,143
"Other Taxes" itemized	7,196
"Other Taxes" allocated	46,203
<hr/>	
	\$342,588

Local

"Other Taxes" itemized	\$8,914
"Other Taxes" allocated	56,472
<hr/>	
Total local taxes	\$65,386

Telegraph and Telephone

Wealth, (1922): \$151,025,000.

The total wealth of telegraph and telephone companies in Pennsylvania was \$151,025,000. The source is "Estimated National Wealth," by the Bureau of the Census, compiled under the direction of Mr. W. I. King.

Income, (1922): \$12,645,634. The net income figure before paying taxes of telephone and telegraph is \$12,645,634. The method of arriving at this figure is as follows: We have the totals for the United States as a whole, from special reports of the Bureau of the Census which are \$15,674,759 for telegraph, and \$96,663,943 for telephone. We are sure of these totals for they agree with the net income figure for telegraph and telephones given by the Statistics of Income, 1922, p. 102. We apportioned Income to Pennsylvania on the same basis that the wealth of Telephone and Telegraph Companies is apportioned to Pennsylvania by Mr. W. L. King, (p. 12, "Estimate National Wealth.") According to his method, Pennsylvania received 5.5% of the wealth of the telegraph and 8% of the wealth of the telephone companies of the United States, and we used these percentages in apportioning income to Pennsylvania.

Income, after paying taxes, Telephone, Pa.....	\$7,733,115
Income, after paying taxes, Telegraph, Pa.....	862,111
<hr/>	
Net Income, Tel. & Tel., after taxes, Pa.....	\$8,595,266
Taxes	4,050,408
<hr/>	
Net Income, Tel. & Tel., Pa., before taxes.....	\$12,645,634

The state corporation taxes paid by telephone and telegraph in Pennsylvania in 1922 was \$443,049. This figure is from the Tax Commission's report.

Water Companies (privately owned)

Wealth, (1923): \$118,467,831. The wealth figure was from the reports to the Public Service Commission and includes Fixed Capital (Real Estate, Pumping System and Pipe Lines) and Current Assets Cash, Materials and Supplies and Accounts Receivable.)

The wealth figure is \$118,467,831. There are 112 companies which are not required to report because their gross operating revenues are less than \$2,000; so the above figure is a minimum figure. The capital invested figure given by the Department of Internal Affairs is \$132,642,650. We preferred to use the figure from the Public Service Commission Reports because we had the corresponding income and tax figures for the same companies from the same source.

Income, (1923): \$6,436,075. Net income before paying taxes as taken from the reports of the Public Service Commission is \$6.436,075.

Taxes: The total taxes from Reports, (1923,) to the Public Service Commission were \$1,036,993.

Federal Income	\$447,389) Reports
Federal Capital Stock	63,352) to
	<hr/>) Public Service
Total Federal Taxes	\$510,741) Commission.

State Taxes—State Corporation Taxes \$418,353 (Report of the Tax Commission).

\$1,036,993.....Total taxes by Water Companies.

939,094.....Total Federal and State.

\$ 107,899.....Local Taxes

There may be some small elements of Federal and State Taxes in the amount assigned to Local.

Trade

Wealth, (1922:) \$1,900,000.00

Corporate Wealth	\$844,950,411
Sole Proprietor Wealth	1,038,881,492

Total Wealth in Trade, Pennsylvania \$1,883,831,903

This figure does not include wealth held in the partnership form of business enterprise.

The total corporate income from Trade in Pennsylvania is \$68,585,635,¹ which is 10% of the total corporate net income figure of \$638,697,493 for Pennsylvania for all groups. Since Trade has 10% of the corporate income in Pennsylvania, we have given it 10% of the corporate aggregate fair value of Pennsylvania for all groups. The aggregate fair value, all groups, Pennsylvania, is \$8,449,504,114 (p. 54, Statistics of Income, 1922) and 10% of this amount is \$844,950,411, which we will use for a corporate wealth figure.

In determining the wealth figure for the individual or sole proprietor business, we assumed the same rate of income for individual trade business as for corporate trade business, which we find to be

¹p. 128, Statistics of Income, 1922.

7.1%. Our wealth figure for individual trade business was found by capitalizing the income figure for individual trade business at 7.1%. The income figure for individual trade business, Pennsylvania, is \$73,760,586. The method of determining this figure is explained below. Capitalizing this figure at 7.1% we have \$1,038,881,492 as the wealth figure for individual trade business, Pennsylvania, 1922.

The rate of income for corporate trade business is found by dividing the corporate income figure for trade in Pennsylvania which is \$60,709,827 after all taxes are paid (Statistics of Income, 1922, p. 128) by the corporate wealth figure for trade, Pennsylvania, which we found by a computation to be \$844,950,411. The result is 7.1%.

Trade, Income, 1922

Corporate income, after all taxes,	\$60,709,827
Sole Proprietor income, after all taxes,	73,760,586
<hr/>	
Total income after taxes, trade,	\$134,470,413
Total taxes,	50,986,707
<hr/>	
Total Income before taxes, trade,	\$185,457,120

This figure does not include income from the partnership form of business.

The corporate income figure as given by the Statistics of Income, 1922, p. 128, is \$68,585,635. This figure represents corporate income after all taxes have been deducted except Federal income and profits taxes, which are \$7,875,808. The corporate income after all taxes will be \$60,709,827. The following method was used for determining the individual or sole proprietor trade income figure:

"Statistics of Income" shows total net income reported by individuals derived "From business operations conducted as sole proprietors." This amount for Pennsylvania in 1922 was \$246,466,497 (p. 90, Statistics of Income, 1922) but this amount is not apportioned to the various industrial groups. We also have the corresponding total for the United States as a whole, which is apportioned among the various industrial groups. Of the income from individual businesses of all groups in the United States 31.30% came from Trade. We have assumed that the same percentage of the Pennsylvania total should be allocated to trade. Multiplying \$246,466,497, which is the personal income, Pennsylvania, from individual business all groups, by 31.39, which is the per cent to be allocated to Trade, we have \$77,365,833 which is the income from

individual trade business in Pennsylvania, after all taxes but personal income taxes. The personal income tax is \$3,605,247, making a net income figure for individual trade business in Pennsylvania, 1922, after all taxes, of \$73,760,586.

State Taxes, Trade, 1922

The following is from the Report of the Pennsylvania Tax Commission, P. 120, 122.

Corporation Mercantile	\$ 982,269
Retail Mercantile Licenses	2,323,441
Wholesale Mercantile License	778,699
Oleomargarine Licenses	428,016
Retail and Wholesale Liquor Licenses	912,113
Gasoline tax, State's share	679,911
Corp. taxes from miscellaneous group allocated to Trade	508,027
<hr/>	
Total State Taxes	\$6,612,476

General Service

General service (called Public Service in the Internal Revenue Reports) includes Professional and other services, such as business services (advertising, appraisers, auditors, actuaries) curative services, legal services, engineering, etc.; amusements, such as theatres, or theatrical organizations, motion picture theatres, and producers; domestic services such as restaurants and hotels.

General Service, Wealth, 1922:

Corporate wealth	\$ 92,944,545
Sole Proprietor Wealth	992,486,210
<hr/>	
Total Wealth	\$1,085,430,755

This figure does not include wealth held in the partnership form of business enterprise.

The total corporate income from Public Service in Pennsylvania is \$8,081,757, (p. 128, Statistics of Income, 1922), which is 1.1% of the total corporate net income figure of \$683,697,493 for Pennsylvania for all groups. Since Public Service has 1.1% of the corporate income in Pennsylvania, we have given it 1.1% of the corporate aggregate fair value of Pennsylvania for all groups. The aggregate fair value, all groups, Pennsylvania, is \$8,449,504,114, (p. 54 Statistics of Income, 1922) and 1.1% of this amount is \$92,944,545, which we will use for a corporate wealth figure.

Assuming the same rate of income for individual public service business, as for corporate public service business, which we find to be 7.6%, our wealth figure for individual public service business is found by capitalizing the income figure for individual public service business at 7.6%. The income figure for individual public service business, Pennsylvania, is \$75,428,952. Capitalizing this figure at 7.6% we have \$992,486,210, as the wealth figure for individual public service business Pennsylvania, 1922.

The rate of income for corporate trade business is found by dividing the corporate income figure for public service in Pennsylvania, which is \$7,120,135 after all taxes are paid (Statistics of Income, 1922, p. 128) by the corporate wealth figure for public service, Pennsylvania, which we found above by a computation to be \$92,944,545. The result is 7.6%.

General Service, Income, 1922

Corporate Income after all taxes are paid ..	\$ 7,120,135
Personal Income from sole proprietor business, after all taxes are paid	75,428,952
	<hr/>
Income after all taxes are paid	\$82,549,087
Total Taxes	27,089,449
	<hr/>
Income before taxes	\$109,638,536

The corporate income figure, as given by the Statistics of Income, 1922, p. 128, is \$8,081,757. This figure represents corporate income after all taxes but Federal income and profit taxes, which are \$961,624. The Corporate income after all taxes is \$7,120,135.

The method of determining the individual or sole proprietor public service income figure is the same method that was used for trade. "Statistics of Income" shows total net income reported by individuals derived "from business operations conducted as sole proprietors," (p. 10, 1922). This amount for Pennsylvania in 1922 was \$246,466,497 (p. 90, 1922); but this amount is not apportioned to the various industrial groups. We also have the corresponding total for the United States as a whole which is apportioned among the various industrial groups; 32.10 per cent of the income from individual business of all groups in the United States came from Public Service (p. 10). We have assumed that the same percentage of the Pennsylvania total should be allocated to General Service.

Income from individual general service business, Pennsylvania, 1922:

Multiplying \$246,466,497 which is the personal income, Pennsylvania, from individual business, all groups, by 32.10 we have \$79,115,745, which is the income from individual service business in Pennsylvania, after all taxes but personal income taxes. The personal income tax is \$3,686,793, making a net income figure of \$75,428,952 for individual general service business in Pennsylvania, 1922, after all taxes are paid.

State Taxes, General Service, 1922

General Service, corporation taxes from miscellaneous domestic corporation group		\$ 71,553
Billiard and pool licenses		185,268
Theatre and circus licenses		56,569
Eating houses		95,783
		<hr/>
		\$409,173

The source of the figure for General Service corporation taxes from the miscellaneous domestic corporation group is given under the description of the domestic corporation group (see p. 82).

The source of three remaining items—billiard and pool licenses, theatre and circus licenses and eating house licenses is the Tax Commission's Report.

WEALTH AND INCOME OF FINANCIAL BUSINESSES IN PENNSYLVANIA AND STATE TAXES PAID

Within the Finance group, according to the classification used by the Bureau of Internal Revenue are included banks, insurance and related business. Banking and related business include private banks, state banks, national banks, trust companies, loan companies, stock and bond brokers, real estate, loan and insurance agents, realty holding and development companies, and holding and leasing realty—not realty business.¹

Insurance includes life insurance, stock, and mutual companies; accident, stock companies only; marine, stock companies only; accident, fire, and marine mutual; fidelity and bonding; and all other insurance companies.²

Placing the classes of corporations in Pennsylvania, as used by the Auditor General,³ under the classification used by the Bureau of Internal Revenue, Banking includes trust companies, national banks, state banks, private banks and incorporated savings institutions. Insurance includes Pennsylvania Reciprocal Exchange, foreign in-

¹Statistics of Income—1922—p. 104.

²Statistics of Income—1922—p. 104.

³Report of Pennsylvania Tax Commission—1925—p. 120.

insurance companies, unregistered foreign insurance, and domestic insurance companies. Related business includes building and loan associations, land and improvement companies, and brokers.

The table following gives totals for wealth, income and State taxes and total taxes for the finance group, which, it is repeated, includes Banking and related business and insurance.

Some explanations of the methods of deriving the amounts in Table 33 need to be made. The amounts for banks will be considered first.

Banks

Wealth. The wealth figure, \$859,407,000, is a total of capital, surplus and undivided profits of trust companies national banks, state banks, private banks and incorporate savings institutions for the year ending June, 1923.¹

Income. The income figures for trust companies and state banks, obtained from the Banking Department, represent net addition to profits during the year ending June 30, 1923. The income figure for National banks, given in the report of the Comptroller of the Currency,² similarly represents the net addition to profits for the year ending June 30, 1923.

To obtain the net income of private banks it was assumed that the relation between wealth and net addition to profits for private banks is the same as that relation for State banks. Using the wealth figure for State banks given in the Departmental Statistics Yearbook it was found that the income was 7.4% of the wealth. The wealth of State banks and private banks was secured by an addition of the capital, surplus, and undivided profits as reported³ in the Departmental Sta-

Table 33. Wealth and Income of Financial Businesses

Industrial Groups	Wealth	Income Before Paying Taxes	% Income to Wealth Before Paying Taxes	Total State Taxes	% Total State Taxes to Wealth	% State Taxes to Income Before Paying Taxes
Banks -----	\$859,407,000	\$163,293,114	12	\$3,709,420	.43	3.59
Insurance -----	328,453,425	84,814,557	25.8	4,762,206	1.4	5.6
Related Insurance ----	\$41,082,099	55,877,243	6.6	1,182,466	.14	2.1
Totals -----	\$2,028,942,515	\$244,014,914	12.02	\$9,701,911	4.7	3.9

Banks includes trust companies, national banks, state banks, private banks, and incorporated savings institutions; *Insurance* includes domestic insurance companies, foreign insurance companies, unregistered foreign insurance companies, and Pennsylvania reciprocal exchange; *Related Industries* includes building and loan associations, land and improvement companies and brokers.

NOTE:—The amount in State Taxes \$47,879 allocated to the Finance group from the miscellaneous corporations group is not included in the table above.

¹Report of Comptroller of Currency—1923—p. 117.

²Report of Comptroller of Currency—1923—p. 61.

³Departmental Statistics—pp. 24 and 26.

tistics for 1924. The percentage of net addition to profits to wealth for State banks was used for the assumption because the percentage was the lowest of the classes of banks. Since national banks earned 11.4% and trust companies earned 10.5%, it seems the 7.4% which is taken for the earnings of private banks is a conservative assumption.

It should be remembered that the wealth figure for private banks does not include all private banks within the State. A provision of the act of June 19, 1911¹ establishing the Banking Department exempts from the operation of the act private bankers who had conducted the business of private banking, continuously and in the same locality, for a period of seven years prior to the approval of the Act. The Banking Department, therefore, has no data for those private banks outside the operation of the act. No sources have been found to secure such data.

The income for incorporated savings institutions was derived from the amount of the State tax on those institutions which is 3% of the net income.²

The State taxes paid by national banks, State banks, private banks, trust companies, and incorporated savings institutions were obtained from the report of the Pennsylvania Tax Commission.³ The figures are for the year ending May 31, 1923.

Two other figures: \$147,175, banking examination fees⁴; and \$588, private bankers' licenses⁵ enter into the total amount of state taxes for banks.

Insurance

Wealth. The wealth figures for foreign and domestic insurance companies were obtained from the Departmental Statistics Yearbook.⁶ The amounts in each case represent total admitted assets less reserves. Since the amounts given in the Departmental Statistics include all states in which the companies operate, an allocation to Pennsylvania was made on the basis of premiums received from the state. In the case of domestic insurance companies 19% of the premiums were secured from within the State while foreign companies operating within the State secured 7.7% of their total premiums therefrom.

Income. The income figures for insurance companies for the year 1923 were secured also from the Departmental Statistics Yearbook.

¹Pa. Statutes 1920, Sec. 1512—p. 147.

²Pa. Tax Commission Report 1925—p. 120.

³Pa. Tax Commission Report, 1925, p. 122.

⁴Auditor General's Report 1921-'23—p. 19.

⁵Auditor General's Report 1921-'23—p. 19.

⁶Departmental Statistics, 1924—pp. 78, 80 & 82.

For both groups, foreign and domestic companies, the amounts were secured by deducting disbursements from total income and adding to that result the amount of dividends to stockholders. And then the result obtained was allocated to Pennsylvania, as were the wealth figures, on the basis of premiums received from within the State.

State Taxes. The state taxes for 1923 are those given by the Pennsylvania Tax Commission¹ and the fees collected for the year by the Insurance Department.² The amount for domestic insurance companies includes \$480,095 derived from taxes and \$42,929 paid in fees. Foreign insurance companies for the same period paid \$4,039,085 in taxes and \$178,403 in fees.

Building and Loan

Wealth. The wealth figure for Building and Loan Associations for the year 1923 was secured from the Banking Department. The amount given in the table includes installment stock dues, matured stock, full paid stock, and earnings due shareholders.

Income. The income figure, representing net income for 1923, was secured from the Banking Department.

State Tax. The only tax on Building and Loan Associations is the state tax on matured stock. The amount of the tax for the year ending May 31, 1923, was obtained from the report of the Pennsylvania Tax Commission.³

Land and Improvement

All of the figures for land and improvement companies except state taxes, were secured by compilation in the Auditor General's Department. The figures are for the year 1923.

Wealth. The amount of wealth is the actual value in cash of entire property assets and goodwill without deduction of encumbrances. The figure is a total for 1668 companies. For 122 companies of that number reports were not available, but *estimates* by the Auditor General of the value of the capital stock and loans could be had and the total estimate, \$6,130,612, was used.

Income. Only 1173 companies of the 1668 reported net income or deficit. The figure for income (Table 33) represents the total net income less total deficits. Three hundred and fourteen companies reported a deficit for the year.

In comparing the wealth and income of this class of corporations, it should be kept in mind that the wealth figure is a total for 1668 companies while the income figure is a total for 1173 companies.

State Taxes. The figure for state taxes was obtained from the report of the Pennsylvania Tax Commission.³

¹Report of Pa. Tax Commission, 1925—p. 122.

²Statement from Insurance Department.

³Report of Pa. Tax Commission, 1925—p. 122.

The amount of state taxes for brokers, \$190,742¹ includes the amount derived from the State license tax on gross receipts, the amount, \$203,328,² derived from the sale of State stock transfer stamps, money lenders' licenses, \$10,500,³ and investment bankers' licenses, \$50.⁴ All the amounts are for the year 1923. The amounts of money lenders' licenses and investment companies' licenses were given for a two-year period and were divided by two to secure the amounts for one year.

One other amount, \$47,879, enters into the total State taxes for the finance group. The amount was allocated to the finance group from the group classified by the Auditor General as miscellaneous corporations. An explanation of the method of allocation is given below in the explanation of the method used to allocate the total amount of miscellaneous domestic corporations taxes, as far as possible, to the various groups.

Miscellaneous Domestic Corporations—State Taxes

In the report of the Pennsylvania Tax Commission 1925, page 122, there is a table giving corporation taxes paid by the various industries. One of the items in the table is a collection of corporations under the heading "Miscellaneous Domestic Corporations" which paid \$1,772,317 in 1923. It was our problem to find out the contents of this miscellaneous group—to pick out, as far as possible, the corporations which should go to finance, trade, construction etc., and thus reduce the miscellaneous corporation group to a minimum.

In the Auditor General's Report, 1920 p. 434, is a list of the miscellaneous corporations for that year which on the whole includes the same corporations as are included under the heading of miscellaneous domestic corporations in the tax commission's report. We went over the list in the Auditor General's report and on the basis of the names and kinds of taxes paid, were able to assign 30% of the total to trade, 42% to public service, 2.1% to construction, 2.7% to finance; the remaining 61% for which sufficient data was not given for allocation, was allowed to remain in the miscellaneous domestic corporations group. Applying these percentages to the amount of the miscellaneous corporation taxes for 1923 which was \$1,772,317 we have \$531,995 for trade, \$74,479 for public service, \$37,239 for construction, \$47,789 finance, and a remainder of \$1,079,950 for the miscellaneous corporation group.

¹Report of Pa. Tax Commission, 1925—p. 121.

²Report of Pa. Tax Commission, 1925—p. 121.

³Auditor General's Report, 1921-23—p. 19.

⁴Auditor General's Report, 1921-23—p. 19.

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